



**CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE
VOLUME 1 – BID BOOKLET**

**Department of
Design and
Construction**

TABLE OF CONTENTS

Introduction 2

Bid Submission Requirements..... 3

Notices to Bidders 4

 Pre Bid Questions (PBQs) 4

 NYC Contract Financing Loan Fund 4

M/WBE Notice to Prospective Contractors 5

Affirmation 13

Bid Schedule 15

Pre-Award Process 17

Project References 19

 A. Contracts completed by the bidder 19

 B. Contracts currently under construction by the bidder 20

 C. Pending contracts not yet started by the bidder 21

Introduction

This Bid Booklet is intended to provide general information necessary for bidding on a DDC public works project and is part of the Contract Documents, as per Article 1.1 of the Standard Construction Contract.

As this contract is solicited via the PASSPort system, the bidder will be required to complete all of the PASSPort forms and questionnaires. These forms and questionnaires, along with the bidder's responses, will become part of the Bid Booklet.

Additional information on the PASSPort system can be found at the following website:

<https://www1.nyc.gov/site/mocs/systems/passport-user-materials.page>

Bid Submission Requirements

THE FOLLOWING MUST BE COMPLETED AND SUBMITTED FOR THE BID TO BE CONSIDERED RESPONSIVE:

1. Completed electronic bid submission in PASSPort;
 - a. All required fields in PASSPort must be completed.
2. One-page signed Bid Submission Form delivered in person to DDC before the bid due date; and
3. Bid security, if required.
 - a. If Bid security is in a form of a bid bond, bidders must include it with their electronic PASSPort submission.
 - b. If Bid security is in a form of a certified check, bidders must deliver the certified check with the signed Bid Submission Form.

BIDDERS ARE ADVISED THAT PAPER BID SUBMISSIONS WILL BE DEEMED NON-RESPONSIVE. BIDDERS MUST SUBMIT THEIR BIDS ELECTRONICALLY IN PASSPORT, PROVIDE THE BID SECURITY, AND DELIVER TO DDC THE ONE-PAGE SIGNED BID SUBMISSION FOR THE BID TO BE CONSIDERED RESPONSIVE.

THE FOLLOWING MAY RESULT IN THE BID BEING FOUND NON-RESPONSIVE:

1. Any discrepancy between the total bid price listed on the Bid Submission Form and the bid information submitted in PASSPort.
2. Failure to upload required files or documents as part of a mandatory PASSPort Questionnaire response.
3. Uploading an incorrect file as part of a mandatory PASSPort Questionnaire response.

Notices to Bidders

Pre Bid Questions (PBQs)

Please be advised that PBQs should be submitted to the Agency Contact Person (CSB_projectinquiries@ddc.nyc.gov) at least five (5) business days (by 5:00 PM EST) prior to the bid opening date as indicated in the PASSPort procurement.

All PBQs must reference the Project ID. If a bidder has multiple PBQs for the same Project ID, the PBQs must be numbered sequentially, even if they are submitted separately.

While the PASSPort system has a facility for submitting inquiries, bidders are directed to send PBQs as directed above instead of using the PASSPort inquiry system.

Inquiries sent using the PASSPort inquiry system will not be considered PBQs.

NYC Contract Financing Loan Fund

If your business is working as a prime or subcontractor on a project with a City agency or City-funded entity, you may be eligible for a Contract Financing Loan from a participating lender coordinated with the NYC Department of Small Business Services (SBS). Loan repayment terms align with the contract payment schedule.

For more information: Call 311 or visit <https://www1.nyc.gov/nycbusiness/article/contract-financing-loan-fund>

M/WBE Notice to Prospective Contractors

PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT (9/2020 version)

ARTICLE I. M/WBE PROGRAM

Section 6-129 of the Administrative Code of the City of New York (“Section 6-129”) establishes the program for participation in City procurement (“M/WBE Program”) by minority-owned business enterprises (“MBEs”) and women-owned business enterprises (“WBEs”), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City’s procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services (“DSBS”) promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the “M/WBE Utilization Plan”) and are detailed below. Contracts solicited through the Procurement and Sourcing Solutions Portal (PASSPort) will contain a Schedule B in the format outlined in the Schedule B – M/WBE Utilization Plan & PASSPort rider. The provisions of this notice will apply to contracts subject to the M/WBE Program established by Section 6-129 regardless of solicitation source.

The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129.

References to MBEs or WBEs shall also include such businesses certified pursuant to the executive law where credit is required by section 311 of the New York City Charter or other provision of law.

Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts.

Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A

PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD

AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS

1. The **MBE and/or WBE Participation Goals** established for this Contract or Task Orders issued pursuant to this Contract, (“**Participation Goals**”), as applicable, are set forth on Schedule B, Part 1 to this Contract (see Page 1, Line 1 Total Participation Goals) or will be set forth on Schedule B, Part 1 to Task Orders issued pursuant to this Contract, as applicable.

The **Participation Goals** represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with DSBS as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If **Participation Goals** have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the **Participation Goals**, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If **Participation Goals** have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant **Participation Goal**, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part 2 (see Pages 1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the **Participation Goals** in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part 2 (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed non-responsive.

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part 2 (see Pages 1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor’s required certification and affirmations. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the **Participation Goals** in accordance with Section 6-129 and Part A, Section 10 below.

C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART 2). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART 3). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where an **M/WBE** Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multi-year contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work.** In the event that the Contractor’s selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms’ participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the firms’ commencement of work. A list of city-certified MBE and WBE firms may be obtained from the DSBS

website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6451, or by visiting or writing DSBS at One Liberty Plaza, New York, New York, 10006, 11th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

7. Where an **M/WBE** Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to, the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's **M/WBE** Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its **M/WBE** Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.

9. Where an **M/WBE** Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or \$500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the **Participation Goals** should be modified.

10. Pre-award waiver of the **Participation Goals**.

(a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the Participation Goals in accordance with Section 6-129, which requests that Agency change one or more **Participation Goals** on the grounds that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part 3 of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at MWBEModification@ddc.nyc.gov. Full or partial waiver requests that are received later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due may be rejected as untimely. Bidders, proposers, or contractors, as applicable, who have submitted timely requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

(d) Agency may grant a full or partial waiver of the **Participation Goals** to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of

subcontracting in its **M/WBE** Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the **Participation Goals**. In making such determination, Agency may consider whether the **M/WBE** Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

11. Modification of **M/WBE** Utilization Plan. (a) A Contractor may request a modification of its **M/WBE** Utilization Plan after award of this Contract. **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission.** The Agency may grant a request for Modification of a Contractor's **M/WBE** Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the **Participation Goals**. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

(i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;

(ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;

(iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;

(iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the **M/WBE** Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;

(v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;

(vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;

(vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;

(viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

Agency's M/WBE officer shall provide written notice to the Contractor of the determination.

(b) The Agency may modify the **Participation Goals** when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its **M/WBE Utilization Plan** would be awarded to subcontractors.

12. If the Contractor was required to identify in its bid or proposal the MBEs and/or WBEs they intended to use in connection with the performance of the Contract or Task Order, substitutions to the identified firms may only be made with the approval of the Agency, which shall only be given when the Contractor has proposed to use a firm that would satisfy the **Participation Goals** to the same extent as the firm previously identified, unless the Agency determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts. In making such determination, the Agency shall require evidence of the efforts listed in Section 11(a) above, as applicable, along with any other relevant factors.

13. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an **M/WBE Utilization Plan** and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

14. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its **M/WBE Utilization Plan**, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

15. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B

MISCELLANEOUS

1. The Contractor shall take notice that, if this solicitation requires the establishment of a **M/WBE Utilization Plan**, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE Utilization Plan**.

2. Pursuant to DSBS rules, construction contracts that include a requirement for a **M/WBE Utilization Plan** shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.

4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

ARTICLE II. ENFORCEMENT

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any **M/WBE** Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any **M/WBE** Utilization Plan, Agency may determine that one of the following actions should be taken:

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional

procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;

(j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or

(k) taking any other appropriate remedy.

4. If an **M/WBE** Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its **Participation Goals** contained in its **M/WBE** Utilization Plan or the **Participation Goals** as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the **Participation Goals** and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the **Participation Goals**, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

7. The Contractor's record in implementing its **M/WBE** Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an **M/WBE** Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in PASSPort as caution data.

Affirmation

The Bidder affirms and declares:

1. The said bidder is of lawful age and the only one interested in this bid; and no person, firm or corporation other than hereinbefore named has any interest in this bid, or in the Contract proposed to be taken.
2. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief: (1) the prices in this bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; (2) unless otherwise required by law, the prices quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and (3) no attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
3. No councilman or other officer or employee or person whose salary is payable in whole or in part from the City Treasury is directly or indirectly interested in this bid, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.
4. The bidder is not in arrears to the City of New York upon debt or contract or taxes, and is not a defaulter, as surety or otherwise, upon any obligation of the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York or State of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except as set forth on the Affirmation included as disclosed in PASSPort.
5. The bidder hereby affirms that is has paid all applicable City income, excise and other taxes for all it has conducted business activities in New York City.
6. The bidder, as an individual, or as a member, partner, director or officer of the bidder, if the same be a firm, partnership or corporation, executes this document expressly warranting and representing that should this bid be accepted by the City and the Contract awarded to him, he and his subcontractors engaged in the performance:

(1) will comply with the provisions of Section 6-108 of the Administrative Code of the City of New York and the non-discrimination provisions of Section 220a of the New York State Labor Law, as more expressly and in detail set forth in the Agreement; (2) will comply with Section 6-109 of the Administrative Code of the City of New York in relation to minimum wages and other stipulations as more expressly and in detail set forth in the Agreement; (3) have complied with the provisions of the aforesaid laws since their respective effective dates, and (4) will post notices to be furnished by the City, setting forth the requirements of the aforesaid laws in prominent and conspicuous places in each and every plant, factory, building and structure where employees engaged in the performance of the Contract can readily view it, and will continue to keep such notices posted until the supplies, materials and equipment, or work labor and services required to be furnished or rendered by the Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a

bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used shall mean the individual bidder, firm, partnership or corporation executing this bid).

7. Compliance Report

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, (1) represents that his attention has been specifically drawn to Executive Order No. 50, dated April 25, 1980, on Equal Employment Compliance of the contract, and (2) warrants that he will comply with the provisions of Executive Order No. 50. The Employment Report must be submitted as part of the bid.

8. The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, executes this document expressly warranting that he will comply with: (1) the provision of the contract on providing records, Chapter 8.
9. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.
10. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.
11. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule.
12. M/WBE UTILIZATION PLAN: By signing its bid, the bidder agrees to the M/WBE Vendor Certification and Required Affirmations set forth below, unless a full waiver of the Participation Goals is granted.

I hereby:

- 1) acknowledge my understanding of the M/WBE participation requirements as set forth in this Contract and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York and the rules promulgated thereunder;
- 2) affirm that the information supplied in support of the M/WBE Utilization Plan is true and correct;
- 3) agree, if awarded this Contract, to comply with the M/WBE participation requirements of this Contract, the pertinent provisions of Section 6-129, and the rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract;
- 4) agree and affirm that it is a material term of this Contract that the Vendor will award the total dollar value of the M/WBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such goals are modified by the Agency; and

agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the M/WBE Participation Goals, or If a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms.

BID SUBMISSION FORM

Bidder Name: A.L.A.C. Contracting Corp.
Procurement Title: 85023B0030-HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENSE
RFx Name: 85023B0030-HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

The above-named bidder affirms and declares:

- 1. The bidder has completed and submitted all required information for the above procurement in the PASSPort system;
- 2. Any discrepancy between the bid price listed on this Bid Submission Form and the bid information submitted in PASSPort may result in the agency finding the bid non-responsive; and
- 3. This bid is being submitted in accordance with New York State General Municipal Law § 103.

Total Bid Price: \$ 26,226,226.26
(a/k/a Total Amount)

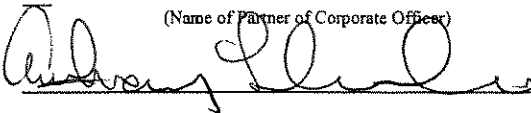
Bidder Signature

EIN (if applicable): 90-0197968

(EIN must match the EIN of the entity that submitted bid information in PASSPort)

Bidder Name: A.L.A.C. contracting Corp.

By: Anthony Labriola Vice President

Signature: 
(Signature of Partner of Corporate Officer)

FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, A.L.A.C. Contracting Corp.
420 Falmouth Road
West Babylon, NY 11704

hereinafter referred to as the "Principal", and Berkshire Hathaway Specialty Insurance Company
1314 Douglas Street, Suite 1400
Omaha, NE 68102

hereinafter referred to as the "Surety" are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "CITY", or to its successors and assigns in the penal sum of _____

Ten Percent of Amount Bid --

(\$ 10%--), Dollars lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal is about to submit (or has submitted) to the City the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for _____

Project ID: HBPED800Q; Reconstruction of Tide Gate Bridge over Flushing Creek, Queens, NY

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said Proposal without the consent of the City for a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's Proposal by the City, if the Principal shall:

(a) Within ten (10) days after notification by the City, execute in quadruplicate and deliver to the City all the executed counterparts of the Contract in the form set forth in the Contract Documents, in accordance with the proposal as accepted, and

(b) Furnish a performance bond and separate payment bond, as may be required by the City, for the faithful performance and proper fulfillment of such Contract, which bonds shall be satisfactory in all respects to the City and shall be executed by good and sufficient sureties, and

(c) In all respects perform the agreement created by the acceptance of said Proposal as provided in the Information for Bidders, bound herewith and made a part hereof, or if the City shall reject the aforesaid Proposal, then this obligation shall be null and void; otherwise to remain in full force and effect.

In the event that the Proposal of the Principal shall be accepted and the Contract be awarded to the Principal the Surety hereunder agrees subject only to the payment by the Principal of the premium therefore, if requested by the City, to write the aforementioned performance and payment bonds in the form set forth in the Contract Documents.

It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

There shall be no liability under this bond if, in the event of the acceptance of the Principal's Proposal by the City, either a performance bond or payment bond, or both, shall not be required by the City on or before the 30th day after the date on which the City signs the Contract.

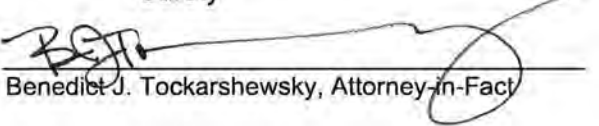
The surety, for the value received, hereby stipulates and agrees that the obligations of the Surety and its bond shall in no way be impaired or affected by any postponements of the date upon which the City will receive or open bids, or by any extensions of the time within which the City may accept the Principal's Proposal, or by any waiver by the City of any of the requirements of the Information for Bidders, and the Surety hereby waives notice of any such postponements, extensions, or waivers.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the 10th day of February, 2023.

(Seal)

A.L.A.C. Contracting Corp. (L.S.)
Principal
By: 

(Seal)

Berkshire Hathaway Specialty Insurance Company
Surety
By: 
Benedict J. Tockarszewsky, Attorney-in-Fact

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Suffolk ss:
On this 2nd day of March, 2023, before me personally came
Anthony Labriola to me known, who, being by me duly sworn, did
depose and say that he/she/they resides at
10 Hicks Circle Hicksville Ny 11801
that he/she/they is the Vice President of
ALAC Contracting Corp

the corporation described in and which executed the foregoing instrument; that he/she/they knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he/she/they signed his name thereto by like order.

ROSEANN ANTONACCI
NOTARY PUBLIC - STATE OF NEW YORK
Registration # 01AN6285226
Commission Expires 07/01/2025

Roseann Antonacci
Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____ County of _____ ss:
On this _____ day of _____, _____, before me personally
appeared _____ to me known and known to me to be one of
the members of the firm of _____ described in and
who executed the foregoing instrument, and he/she/they acknowledged to me that he/she/they
executed the same as and for the act and deed of said firm.

Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:
On this _____ day of _____, _____, before me personally
appeared _____ to me known and known to me to be the
person described in and who executed the foregoing instrument and acknowledged that
he/she/they executed the same.

Notary Public

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES

Surety Acknowledgment

State of **New York**

County of **Westchester County**

On the 10th day of **February, 2023** personally came **Benedict J. Tockarszewsky** to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of **Berkshire Hathaway Specialty Insurance Company** in and which executed the above Instrument know(s) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

TINA CASTIELLO
NOTARY PUBLIC - STATE OF NEW YORK
NO. 01CA6191205
QUALIFIED IN WESTCHESTER COUNTY
MY COMMISSION EXPIRES AUGUST 04, 2024

My commission expires



Notary Public

Power Of Attorney

**BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY
NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY**

Know all men by these presents, that **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, **NATIONAL INDEMNITY COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: **Benedict J. Tockarshewsky, Marnie Ginsburg, William D. Haas, 333 Westchester Avenue, Southwest Building, Suite 102 of the city of White Plains, State of New York**, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. **This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.**

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of December 20, 2018. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively. The following signature by an authorized officer of the Company may be a facsimile, which shall be deemed the equivalent of and constitute the written signature of such officer of the Company for all purposes regarding this Power of Attorney, including satisfaction of any signature requirements on any and all undertakings, bonds, or other such writings obligatory in the nature thereof, to which this Power of Attorney applies.

**BERKSHIRE HATHAWAY SPECIALTY
INSURANCE COMPANY,**



By: _____
David Fields, Executive Vice President



**NATIONAL INDEMNITY COMPANY,
NATIONAL LIABILITY & FIRE INSURANCE COMPANY,**



By: _____
David Fields, Vice President

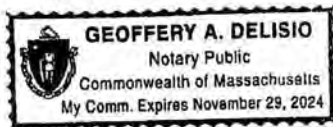
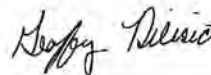


NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 20th day of December, 2018, before me appeared David Fields, Executive Vice President of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY** and Vice President of **NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]

Notary Public

I, Ralph Tortorella, the undersigned, Officer of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, see hereunto affixed the seals of said Companies this February 10, 2023.




Officer

To verify the authenticity of this Power of Attorney please contact us at: BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, One Lincoln Street, 23rd Floor Boston, MA 02111 | (770) 625-2516 or by email at Jennifer.Porter@bhspecialty.com. **THIS POWER OF ATTORNEY IS VOID IF ALTERED**

To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claims.notice@bhspecialty.com, via fax to (617) 507-8259, or via mail.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102-1944

ADMITTED ASSETS*

	<u>12/31/2021</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Total invested assets	\$ 6,504,184,299	\$ 5,475,240,588	\$ 5,172,183,338
Premium & agent balances (n)	552,510,359	603,615,506	368,086,012
All other assets	142,765,038	157,897,676	127,524,677
Admitted Assets	<u>\$ 7,199,459,696</u>	<u>\$ 6,236,753,770</u>	<u>\$ 5,667,794,027</u>

LIABILITIES & SURPLUS*

	<u>12/31/2021</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Loss & loss exp. unpaid	\$ 1,142,116,028	\$ 921,923,948	\$ 634,745,558
Unearned premiums	484,660,143	372,836,160	314,117,549
All other liabilities	1,163,007,684	1,054,922,210	744,738,458
Total Liabilities	<u>2,789,783,855</u>	<u>2,349,682,318</u>	<u>1,693,601,565</u>
Total Policyholders' Surplus:	<u>4,409,675,842</u>	<u>3,887,071,452</u>	<u>3,974,192,463</u>
Total Liabilities & Surplus	<u>\$ 7,199,459,697</u>	<u>\$ 6,236,753,770</u>	<u>\$ 5,667,794,028</u>

* Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.

SPECIAL EXPERIENCE REQUIREMENTS FOR THE BIDDER:

The Special Experience Requirements set forth below apply to the bidder. Compliance with such Special Experience Requirements will be determined solely by the City prior to an award of contract. Failure to comply with the Special Experience Requirements will result in rejection of the bid as non-responsive.

The requirements in this Section (A) apply to this contract where indicated by a blackened box (■).

- The bidder must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work. Such prior project may have been performed as a prime contractor, subcontractor or sub-subcontractor.

The Special Experience Requirements next to the blackened box below apply to the bidder. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. The contractor, subcontractor or sub-subcontractor (hereinafter referred to as the "Entity") that will perform any specific area of work indicated by the blackened box below, may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

- Trunk Water Main Work:** The Entity that will perform the trunk water main work must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work.
- Best Management Practice Work:** Best Management Practice ("BMP") Work is any item of work in the Bid Schedule that begins with the prefix "BMP". The Entity that will perform any BMP Work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work.
For professional services in connection with BMP Work (i.e., monitoring and reporting services), the individual who will perform the required services must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. Additional requirements are set forth below.
 - The individual serving as the Restoration Specialist (Construction Monitor) must be a Registered Landscape Architect licensed by the state of New York, or must have equivalent professional experience.
 - The individual serving as the Erosion and Sediment Control Licensed/Certified Professional must be a Certified Professional in Erosion and Sediment Control (CPESC), certified by CPESC, Inc.
- Micro-Tunneling/Pipe Jacking Work:** The Entity that will perform the micro-tunneling/pipe jacking work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.
- OTHER:** _____

SPECIAL EXPERIENCE REQUIREMENTS FOR ENTITIES PERFORMING SPECIFIC AREAS OF WORK:

The requirements in this Section (B) apply to this contract where indicated by a blackened box (■).

The Special Experience Requirements set forth below apply to the Entity that will perform the specific area of work. **Compliance with such Special Experience Requirements will be determined solely by the City after an award of contract. Within two (2) weeks of award of contract, the contractor will be required to submit the qualifications of the Entity that will perform the specific area of work.** If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

Special Experience Requirements apply to the Entity that will perform any specific area of work indicated by a blackened box. The Entity may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor.

- **Hazmat Work:** Hazmat Work is any item of work in the Bid Schedule that begins with the prefix 8.01. The Entity that will perform any Hazmat Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least five (5) projects similar in scope and type to the required work.
- **Pile, CFA Pile, and/or Mini-Pile Work:** The Entity that will perform the Pile, CFA Pile and/or Mini-Pile Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Pile Work (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.

- **Construction Report, Monitoring and Post-Construction Report, and Continuous Real-Time Monitoring For Vibrations and Movements and Post-Construction Report Work:** The Entity that will perform the Construction Report, Monitoring For Vibrations And Movements, and Post-Construction Report Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Reporting and Monitoring Work (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.

- **OTHER: 1. The entity furnishing Tide gate as described in 6.50TG.2 must be a single manufacturer with a minimum of 7 (seven) years' experience designing and manufacturing water control gates and must have at least 5 (five) successful Pontoon Tide Gate installations.**

2. The entity designing the excavation support systems as described in 9.10 TES must have a minimum of three (3) years of proven experience designing excavation support systems.

3. The entity proposing to do asbestos abatement work as described in 220013 must be thoroughly experienced in such work and must submit a list of five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$1,000,000 in each of the three years.

QUALIFICATION FORM

Name of Contractor: A.L.A.C. Contracting Corp.

Name of Project: SE851 – Flatlands Ave. Construction of Storm Sewer Combined, Sanitary....

Location of Project: Flatlands Ave., Brooklyn, NY

Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:

Name: NYCDDC – Louis Jusma

Title: E.I.C.

Phone Number: 718-975-8150

Brief description of the Project completed or the Project in progress: Construction of Storm, Combined , Sanitary Sewer Water Main and Appurtenances

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime

Amount of Contract, Subcontract or Sub-subcontract: \$56,556,556.56

Start Date and Completion Date: 2016 to 6/25/2019

Name of Contractor: A.L.A.C. Contracting Corp.

Name of Project: Storm Sewer, Sanitary Sewers Water Main in Coney Island Area

Location of Project: Coney Island, NY

Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:

Name: Peter Georgy

Title: E.I.C.

Phone Number: 732-261-3922

Brief description of the Project completed or the Project in progress: Construction of Storm Sewers Sanitary Sewers and Water Mains

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime

Amount of Contract, Subcontract or Sub-subcontract: \$44,443,446.44

Start Date and Completion Date: 2016 to June 2022

Part 1: M/WBE Participation Goals

Contract Overview (To be completed by contracting agency)

APT E-Pin# 85023B0030 FMS Project ID# HPPED800Q
 Project Title Reconstruction of Tide Gate Bridge Over Flushing Creek Agency PIN# 8502020HW0026C
 Contracting Agency DEPARTMENT OF DESIGN AND CONSTRUCTION Bid/Proposal Response Date _____
 Agency Address 30-30 Thomson Ave City Long Island City State NY ZIP 11101
 Contact Person Janelle Husain-Singh Title M/WBE Outreach and Compliance Analyst
 Telephone 718-391-1322 Email husainja@ddc.nyc.gov

Project Description (attach additional pages if necessary)

Reconstruction of Tide Gate Bridge Over Flushing Creek-B.I.N. 2-27069-0,
Borough of Queens

Bidder or proposer is required OR is not required to specifically identify the contact information of all M/WBE firms they intend to use as a subcontractor on this contract, including the M/WBE vendor name, address and telephone number in the space provided below in Part 2 Section 4.

M/WBE Participation Goals for Services

Enter the percentage amount for each category or for an unspecified Goal.

Prime Contract Industry: Infrastructure

Category and Breakdown:

Unspecified 23.00 %

Black American _____ %

Hispanic American _____ %

Asian American _____ %

Women _____ %

Total Participation Goals 23.00 %
Line 1

Part 2: M/WBE Participation Plan

(To be completed by the bidder/proposer unless granted a full waiver, which must be submitted with the bid/proposal in lieu of this form)

Section 1: Prime Contractor Contact Information

Tax ID# 900197968 FMS Vendor ID# _____
 Business Name A.L.A.C. Contracting Corp. Contact Person Anthony Labriola
 Business Address 420 Falmouth Road City West Babylon State NY ZIP 11704
 Telephone 631-422-3870 Email labriola@optonline.net

Section 3: Contractor M/WBE Utilization Plan

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation. Check applicable box. The Proposer or Bidder will fulfill the M/WBE Participation Goals:

- As an M/WBE Prime Contractor that will self-perform and/or subcontract to other M/WBE firms a portion of the contract the value of which is at least the amount located on Lines 2 or 3 in the panels in Section 2, as applicable. The value of any work subcontracted to non-M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals. Please check all that apply to Prime Contractor: MBE WBE
- As a Qualified Joint Venture with an M/WBE partner, in which the value of the M/WBE partner's participation and/or the value of any work subcontracted to other M/WBE firms is at least the amount located on Lines 2 or 3 in the panels in Section 2, as applicable. The value of any work subcontracted to non-M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals.
- As a non-M/WBE Prime Contractor that will enter into subcontracts with M/WBE firms the value of which is at least the amount located on Lines 2 or 3 in the panels in Section 2, as applicable.

Section 2: M/WBE Utilization Goal Calculation

Prime Contractor Adopting Agency Participation Goals

For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.

Total Bid/Proposal Value \$ 26,226,226.26

multiplied by x

Total Participation Goals 23.00 %
(Line 1 above)

Calculated M/WBE Participation Amount \$ 6,032,032.04
Line 2

OR

Prime Contractor With Partial Waiver Approval Adopting Revised Participation Goals

For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Revised M/WBE Participation Goals.

Total Bid/Proposal Value \$ _____

multiplied by x

Total Revised Participation Goals _____ %

Calculated M/WBE Participation Amount \$ _____
Line 3

Section 4: General Contract Information

What is the expected percentage of the total contract dollar value that you expect to award in subcontracts for services, regardless of M/WBE status?

27.00 %

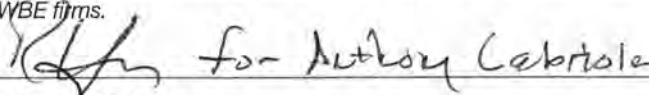
Enter a brief description of the type(s) and dollar value of subcontracts for all services you plan to subcontract if awarded this contract, along with the anticipated start and end dates for such subcontracts. For each item, indicate whether the work is designated for participation by an M/WBE. Where the contracting agency's solicitation has indicated a requirement that the bidder or proposer specifically identify the contact information of all M/WBEs they intend to use on this contract, vendors must also include the M/WBE vendor name, address and telephone number in the space provided below. Use additional sheets if necessary.

Description of Work	Start Date (MM/YY)	End Date (MM/YY)	Planned \$ Amount	Designated for M/WBE		M/WBE Vendor Name	M/WBE Address	M/WBE Telephone
				Y	N			
1. Survey	05 / 23	12 / 26	\$ 100,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
2. Pipe	06 / 23	12 / 24	\$ 200,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
3. Landscaping	10 / 25	04 / 26	\$ 100,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
4. Fence, Rail, Sign	12 / 24	03 / 26	\$ 50,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
5. Paint	10 / 25	03 / 26	\$ 350,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
6. Tidal Gates	07 / 24	07 / 25	\$ 150,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
7. Rebar	06 / 23	07 / 25	\$ 200,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
8. Trucking	07 / 23	03 / 26	\$ 1,000,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
9. Steel	11 / 23	12 / 25	\$ 3,500,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -
10. Hazardous	08 / 23	08 / 25	\$ 500,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>			() -

Section 5: Vendor Certification and Required Affirmations

I hereby:

1. acknowledge my understanding of the M/WBE participation requirements as set forth herein and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York ("Section 6-129"), and the rules promulgated thereunder;
2. affirm that the information supplied in support of this M/WBE Utilization Plan is true and correct;
3. agree, if awarded this Contract, to comply with the M/WBE participation requirements of this Contract, the pertinent provisions of Section 6-129, and the rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract;
4. agree and affirm that it is a material term of this Contract that the Vendor will award the total dollar value of the M/WBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such Goals are modified by the Agency; and
5. agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the M/WBE Participation Goals, or if a partial waiver is obtained or such Goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms.

Signature  Date 3/9/23
 Print Name Anthony Labriola Robert Hug - Program Manager Title Vice President

SCHEDULE B – Part 3

Request for Waiver of M/WBE Participation Requirement

Contract Overview

Tax ID# _____ FMS Vendor ID# _____
 Business Name _____ Contact Name _____
 Email _____ Telephone _____
 Contracting Agency _____
 PASSPort PIN# _____ Bid/Proposal Due Date _____

M/WBE Participation Goals for Services

Defined by AGENCY in bid/ solicitation documents
 Percent of the total contract value to be subcontracted to M/WBE vendors for services and/or credited to an M/WBE Qualified Joint Venture.

Unspecified _____ %
 Black American _____ %
 Hispanic American _____ %
 Native American _____ %
 Asian American _____ %
 Women _____ %

Total Participation Goals _____ %

Basis for Waiver Request: Check appropriate box & explain in detail below (attach additional pages if needed)

- Vendor does not subcontract services, and has the capacity and good faith intention to perform all such work itself with its own employees.
- Vendor subcontracts some of this type of work but at a lower % than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract. Identify your subcontracting plan in the vendor certification section below.
- Vendor has other legitimate business reasons for proposing the M/WBE Participation Goal requested here. Explain under separate cover.

Proposed by VENDOR seeking waiver

Percent of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted to M/WBE businesses for services. Or if M/WBE Qualified Joint Venture, percent of total contract value anticipated to be credited to M/WBE vendor(s).

Unspecified _____ %
 Black American _____ %
 Hispanic American _____ %
 Native American _____ %
 Asian American _____ %
 Women _____ %

Total Participation Goals _____ %

Vendor Contract History

Using the [linked Excel template](#), list all contracts (for City and Non-City work) performed within the last 3 years and provide the requested information for each contract.

From the list of all contracts, provide reference information below for the 5 most relevant contracts in size, scale and scope (performed for New York City or any other entity) to the bid or proposal for which you are submitting this waiver request. Provide the requested information for each subcontract awarded during the life of the listed reference contract.

Please make sure to highlight the 5 reference contracts provided below among the comprehensive list of all your contract awards within the attached Excel template.

Reference 1

Agency/Organization _____ Contract # _____
 Reference Contact _____ Telephone _____ Email _____
 Contract Start Date _____ Contract End Date _____ Total Contract Value \$ _____

Prime Contract description

- Did the vendor perform as a Prime Contractor or as a Subcontractor? Prime Contractor Subcontractor
- Was the Prime Contract subject to any Goals? City M/WBE Goals State Goals Federal Goals No Applicable Goals
- Did the Prime Contractor meet Goal requirements? Yes No N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.

_____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.

_____ \$ _____

Reference 2

Agency/Organization _____ Contract # _____
Reference Contact _____ Telephone _____ Email _____
Contract Start Date _____ Contract End Date _____ Total Contract Value \$ _____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? Prime Contractor Subcontractor
Was the Prime Contract subject to any Goals? City M/WBE Goals State Goals Federal Goals No Applicable Goals
Did the Prime Contractor meet Goal requirements? Yes No N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors. _____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed. _____ \$ _____

Reference 3

Agency/Organization _____ Contract # _____
Reference Contact _____ Telephone _____ Email _____
Contract Start Date _____ Contract End Date _____ Total Contract Value \$ _____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? Prime Contractor Subcontractor
Was the Prime Contract subject to any Goals? City M/WBE Goals State Goals Federal Goals No Applicable Goals
Did the Prime Contractor meet Goal requirements? Yes No N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors. _____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____
_____ \$ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed. _____ \$ _____

Reference 4

Agency/Organization _____ Contract # _____
 Reference Contact _____ Telephone _____ Email _____
 Contract Start Date _____ Contract End Date _____ Total Contract Value \$ _____
Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? Prime Contractor Subcontractor
 Was the Prime Contract subject to any Goals? City M/WBE Goals State Goals Federal Goals No Applicable Goals
 Did the Prime Contractor meet Goal requirements? Yes No N/A
If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.
 _____ \$ _____

Reference 5

Agency/Organization _____ Contract # _____
 Reference Contact _____ Telephone _____ Email _____
 Contract Start Date _____ Contract End Date _____ Total Contract Value \$ _____
Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? Prime Contractor Subcontractor
 Was the Prime Contract subject to any Goals? City M/WBE Goals State Goals Federal Goals No Applicable Goals
 Did the Prime Contractor meet Goal requirements? Yes No N/A
If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 _____ \$ _____
 Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.
 _____ \$ _____

Vendor Certification

Identify/list all the work areas you intend on subcontracting on the current anticipated contract for which you are submitting this waiver request.

I hereby affirm that the information supplied in support of this waiver request is true and correct, and that this request is made in good faith. I further affirm that the work that I did not list as work that will be subcontracted on this contract for which I am submitting this waiver request is work that I have performed on past contracts and will not subcontract if awarded this contract.

Signature _____ Date _____
 Print Name _____ Title _____

Partial Waiver Approved with Revised Participation Goals
 Unspecified _____ %
 Black American _____ %
 Hispanic American _____ %
 Native American _____ %
 Asian American _____ %
 Women _____ %
Total Revised Goals _____ %

Approvals (for Agency completion only)
 ACCO Signature _____ Date _____
 CCPO Signature _____ Date _____

Waiver Determination
 Full Waiver Approved
 Waiver Denied

SAFETY QUESTIONNAIRE

The Bidder must include, with its bid, all information requested on this Safety Questionnaire. Failure to provide a completed and signed Safety Questionnaire at the time of bid opening may result in disqualification of the bid as non-responsive. This Safety Questionnaire will be reviewed as per Section V of the Safety Requirements for Construction Contracts, found in Volume 2 of the Contract.

1. Bidder Information:

Company Name: A.L.A.C. Contracting Corp.

DDC Project Number: HBPED800Q

Company Size: Ten (10) employees or less
 Greater than ten (10) employees

Company has previously worked for DDC: YES NO

2. Type(s) of Construction Work:

Identify the types of work that the Bidder has performed in the last three years, and the types of work that are part of this Contract.

<u>TYPE OF WORK</u>	<u>LAST 3 YEARS</u>	<u>THIS PROJECT</u>
General Building Construction	<input type="checkbox"/>	<input type="checkbox"/>
Residential Building Construction	<input type="checkbox"/>	<input type="checkbox"/>
Nonresidential Building Construction	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Construction, except building	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Highway and Street Construction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Heavy Construction, except highways	<input type="checkbox"/>	<input type="checkbox"/>
Plumbing, Heating, HVAC	<input type="checkbox"/>	<input type="checkbox"/>
Painting and Paper Hanging	<input type="checkbox"/>	<input type="checkbox"/>
Electrical Work	<input type="checkbox"/>	<input type="checkbox"/>
Masonry, Stonework and Plastering	<input type="checkbox"/>	<input type="checkbox"/>
Carpentry and Floor Work	<input type="checkbox"/>	<input type="checkbox"/>
Roofing, Siding, and Sheet Metal	<input type="checkbox"/>	<input type="checkbox"/>
Concrete Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Specialty Trade Contracting	<input type="checkbox"/>	<input type="checkbox"/>
Asbestos Abatement	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>

3. Experience Modification Rate:

The Experience Modification Rate (EMR) is a rating generated by the National Council of Compensation Insurance (NCCI). This rating is used to determine the contractor's premium for worker's compensation insurance. The Bidder / Contractor may obtain its EMR by contacting its insurance broker or the NCCI. If the Bidder cannot obtain its EMR, it must submit a written explanation as to why.

The Bidder must indicate its Intrastate and Interstate EMR for the past three years. [Note: For contractors with less than three years of experience, the EMR will be considered to be 1.00].

YEAR	<u>INTRASTATE RATE</u>	<u>INTERSTATE RATE</u>
2020	.92	.92
2021	.99	.99
2022	.81	.81

If the Intrastate and/or Interstate EMR for any of the past three years is greater than 1.00, the Bidder / Contractor must attach, to this questionnaire, a written explanation for the rating and identify what corrective action was taken to correct the situation resulting in that rating.

4. OSHA Information:

YES NO Contractor has received a willful violation issued by OSHA or a New York City Department of Buildings (NYCDOB) construction-related violation within the last three years.

YES NO Contractor has had an incident requiring OSHA notification within 8 hours (all work-related fatalities) or an incident requiring OSHA notification within 24 hours (work-related in-patient hospitalization, amputation and all loss of an eye).

The OSHA Form 300 “Log of Work-Related Injuries and Illnesses” and OSHA Form 300A “Summary of Work-Related Injuries and Illnesses” must be submitted for the last three years for Contractors with more than ten employees.

The Bidder / Contractor must indicate the total number of hours worked by its employees, as reflected in payroll records for the past three (3) years.

The Bidder / Contractor must submit the Incident Rate for Lost Time Injuries (the Incident Rate) for the past three (3) years. The Incident Rate is calculated in accordance with the formula set forth below. For each given year, the total number of incidents is the total number of non-fatal injuries and illnesses reported on the OSHA Form 300 and OSHA Form 300A. The 200,000 hours represents the equivalent of 100 employees working forty hours a week, fifty (50) weeks per year.

$$\text{Incident Rate} = \frac{\text{Total Number of Incidents} \times 200,000}{\text{Total Number of Hours Worked by Employees}}$$

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
2020	36651	0
2021	37642	0
2022	58155.55	0

If the Bidder's / Contractor's Incident Rate for any of the past three years is one point higher than the Incident Rate for the type of construction it performs (listed below), the Bidder / Contractor must attach, to this questionnaire, a written explanation for the relatively high rate.

General Building Construction	8.5
Residential Building Construction	7.0
Nonresidential Building Construction.....	10.2
Heavy Construction, except building	8.7
Highway and Street Construction	9.7
Heavy Construction, except highways	8.3
Plumbing, Heating, HVAC	11.3
Painting and Paper Hanging.....	6.9
Electrical Work	9.5
Masonry, Stonework and Plastering.....	10.5
Carpentry and Floor Work	12.2
Roofing, Siding, and Sheet Metal	10.3
Concrete Work.....	8.6
Specialty Trade Contracting	8.6

5. Safety Performance on Previous DDC Project(s)

YES NO Fatality or an incident requiring OSHA notification within 24 hours (work-related in-patient hospitalization, amputation and all loss of an eye) on DDC Project(s) within the last three (3) years.

DDC Project Number(s): _____, _____, _____

The Bidder hereby affirms that all the information provided in this Safety Questionnaire and all additional pages and/or attachments, if applicable, consist of accurate representations.

Date: 3/13/23

By: 
(Signature of Bidder: Owner, Partner, Corporate Officer)

Title: Vice President

Bid Schedule

The Questionnaire in the PASSPort system contains the Bid Schedule. Items listed in the Bid Schedule shall comply with the requirements of the corresponding sections of the specifications detailed in the table below. All references to the Standard Specifications, Details, Standards and Drawings shall be to the version in effect at the time of bid.

NOTES:

- “XXX” in the table below signifies any possible combination of characters and spaces.
- The table below may contain item formats which are not included in the Bid Schedule.
Please refer to the Bid Schedule to determine which specifications apply.

Item Number Format	Applicable Specifications
4.XXX 6.XXX 7.XXX 8.XXX <i>(Except 8.01 XXX; see below)</i> 9.XXX HW-XXX	NYC Department of Transportation (“DOT”) Standard Highway Specifications, as amended in the R-Pages, located in Volume 3 of 3 herein; <p style="text-align: center;">AND</p> NYC DOT Standard Details of Construction; <p style="text-align: center;">OR,</p> <i>if the item is not contained within the Standard Specifications,</i> then see the applicable New Sections in the I-Pages, located in Volume 3 of 3 herein.
1.XXX 50.XXX through 55.XXX 60.XXX through 66.XXX 70.XXX through 79.XXX <i>(Except 79.11XXX; see below)</i> DSS XXX DSW XXX	NYC Department of Environmental Protection (“DEP”) Standard Sewer and Water Main Specifications, as amended in the R-Pages and SW-Pages, located in Volume 3 of 3 herein; <p style="text-align: center;">AND</p> NYC DEP Specifications for Trunk Main Work; <p style="text-align: center;">AND</p> NYC DEP Sewer Design Standards; <p style="text-align: center;">AND</p> NYC DEP Water Main Standard Drawings; <p style="text-align: center;">OR,</p> <i>if the item is not contained within the Standard Specifications,</i> then see the Amendments to the Standard Sewer and Water Main Specifications in the SW-Pages, located in Volume 3 of 3 herein.
GI-XXX PM-XXX ROW XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein <p style="text-align: center;">AND</p> NYC DEP Standards for Green Infrastructure.

Item Number Format	Applicable Specifications
UTL-XXX	Gas Cost Sharing Standard Specifications in the EP7-Pages, located in Volume 3 of 3 herein.
83X.XXX MX.XXX MP XXX NYC-XXX NYCT-XXX NYPD-XXX P XXX PK-XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein.
BMP-XXX	Specifications for Construction of Best Management Practice (BMP) and Mitigation Area in the BMP-Pages, located in Volume 3 of 3 herein.
E XXX ME XXX	Specifications for the Specialty Electrical Works in the EL-Pages, located in Volume 3 of 3 herein.
SL-XXX	NYC DOT Division of Street Lighting Specifications AND NYC Division of Street Lighting Standard Drawings.
T-XXX	NYC DOT Specifications for Traffic Signals and Intelligent Transportation Systems AND NYC DOT Traffic Signal Standard Drawings.
JB XXX	Joint Bid Specifications in the JB-Pages, located in Volume 3 of 3 herein.
8.01 XXX	Specifications for Handling, Transportation and Disposal of Nonhazardous and Potentially Hazardous Contaminated Materials in the HAZ-Pages, located in Volume 3 of 3 herein.
67.XXX	Specifications for Abatement of Coal Tar Wrap Asbestos Containing Materials in the ASB-Pages, located in Volume 3 of 3 herein.
79.11XXX	Specifications for Abatement of Transit Authority Duct Insulation Asbestos Containing Materials in the ASB-Pages, located in Volume 3 of 3 herein.

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE

Project ID: HBPED800Q
ePIN: 85023B0030

TOTAL BID PRICE: \$26,226,226.26

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Seq. No	Item Number	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
1	202.120001	REMOVING EXISTING SUPERSTRUCTURES	1.00	L.S.	\$804,235.71	\$804,235.71	
2	203.21	SELECT STRUCTURAL FILL	980.00	C.Y.	\$100.00	\$98,000.00	
3	204.04	LIGHTWEIGHT CONCRETE FILL (TYPE B)	220.00	C.Y.	\$600.00	\$132,000.00	
4	207.22	GEOTEXTILE DRAINAGE	300.00	S.Y.	\$30.00	\$9,000.00	
5	209.22	CONSTRUCTION ENTRANCE	100.00	S.Y.	\$40.00	\$4,000.00	
6	4.02 AG	ASPHALTIC CONCRETE WEARING COURSE, 3" THICK	440.00	S.Y.	\$30.00	\$13,200.00	
7	4.04 HD	CONCRETE BASE FOR PAVEMENT, 9" THICK (HIGH-EARLY STRENGTH)	320.00	C.Y.	\$600.00	\$192,000.00	
8	4.07 BA	RESET GRANITE CURB	100.00	L.F.	\$55.00	\$5,500.00	
9	4.08 BA	CONCRETE CURB (21" DEEP)	670.00	L.F.	\$50.00	\$33,500.00	
10	4.13 DSA	SURFACE APPLIED DETECTABLE WARNING UNITS	100.00	S.F.	\$55.00	\$5,500.00	
11	4.14 W	WELDED STEEL WIRE FABRIC	1,550.00	LBS.	\$2.00	\$3,100.00	
12	4.16 AA	TREES REMOVED (4" TO UNDER 12" CALIPER)	30.00	EACH	\$800.00	\$24,000.00	
13	4.16 AB	TREES REMOVED (12" TO UNDER 18" CALIPER)	1.00	EACH	\$1,600.00	\$1,600.00	
14	4.16 AC	TREES REMOVED (18" TO UNDER 24" CALIPER)	2.00	EACH	\$2,500.00	\$5,000.00	
15	4.16 AD	TREES REMOVED (24" CALIPER AND OVER)	3.00	EACH	\$4,500.00	\$13,500.00	
16	4.16 BA	TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	90.00	EACH	\$1,500.00	\$135,000.00	
17	4.16 HA	TREES PLANTED, 5' TO 6' HIGH, ALL TYPES	29.00	EACH	\$1,500.00	\$43,500.00	
18	4.16 HB	TREES PLANTED, 8' TO 10' HIGH, ALL TYPES	12.00	EACH	\$800.00	\$9,600.00	
19	4.17 AB	SHRUBS PLANTED, 30" TO 36" HIGH, ALL TYPES	31.00	EACH	\$75.00	\$2,325.00	
20	4.17 AC	SHRUBS PLANTED, 18" TO 24" HIGH, ALL TYPES	485.00	EACH	\$55.00	\$26,675.00	
21	4.17 CPL	PLUGS, GRASSES	3,650.00	EACH	\$6.00	\$21,900.00	
22	4.17 P1QT	PERENNIALS 1 QT	495.00	EACH	\$22.00	\$10,890.00	
23	4.18 A	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	44.00	EACH	\$400.00	\$17,600.00	
24	4.18 B	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	4.00	EACH	\$500.00	\$2,000.00	
25	4.18 C	MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	2.00	EACH	\$600.00	\$1,200.00	
26	4.18 D	MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	3.00	EACH	\$800.00	\$2,400.00	
27	4.19	SODDING	2,385.00	S.Y.	\$60.00	\$143,100.00	
28	4.21	TREE CONSULTANT	800.00	P/HR	\$25.00	\$20,000.00	
29	5.37	CONSTRUCTION REPORT	1.00	L.S.	\$40,000.00	\$40,000.00	
30	51.2150A1000E	STANDARD MANHOLE TYPE A-1 ON EXISTING SEWER	1.00	EACH	\$13,500.00	\$13,500.00	
31	51.41D002	STANDARD DOUBLE CATCH BASIN, TYPE 2	1.00	EACH	\$13,500.00	\$13,500.00	
32	51.71BW30X3	MODIFICATION OF EXISTING TYPE 3 CATCH BASIN WITHOUT CURB PIECE TO TYPE 3 WITH CURB PIECE	1.00	EACH	\$4,000.00	\$4,000.00	
33	51.71M00000	MODIFICATION OF EXISTING MANHOLE	5.00	EACH	\$1,600.00	\$8,000.00	
34	52.11D12	12" DUCTILE IRON PIPE BASIN CONNECTION	30.00	L.F.	\$250.00	\$7,500.00	
35	551.50025	DRILLED SHAFTS (2.5 FT DIAMETER)	80.00	L.F.	\$65.00	\$5,200.00	
36	553.020001	COFFERDAMS (TYPE 2)	2.00	EACH	\$1,000,000.00	\$2,000,000.00	
37	555.0105	CONCRETE FOR STRUCTURES, CLASS A	1,100.00	C.Y.	\$1,400.00	\$1,540,000.00	
38	555.09	CONCRETE FOR STRUCTURES, CLASS HP	50.00	C.Y.	\$3,000.00	\$150,000.00	
39	555.80020001	CRACK REPAIR BY EPOXY INJECTION (RESTORATION)	50.00	L.F.	\$175.00	\$8,750.00	
40	556.0201	UNCOATED BAR REINFORCEMENT FOR STRUCTURES	104,468.00	LBS.	\$4.00	\$417,872.00	
41	556.0202	EPOXY- COATED BAR REINFORCEMENT FOR STRUCTURES	1,500.00	LBS.	\$4.00	\$6,000.00	
42	556.0203	GALVANIZED BAR REINFORCEMENT FOR STRUCTURES	66,900.00	LBS.	\$4.00	\$267,600.00	
43	556.03	STUD SHEAR CONNECTORS FOR BRIDGES	6,860.00	EACH	\$5.00	\$34,300.00	
44	557.0103	SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK REQ'D - TYPE 3 FRICTION	1,400.00	S.Y.	\$900.00	\$1,260,000.00	
45	557.2003	STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE - TYPE 3 FRICTION	500.00	S.Y.	\$900.00	\$450,000.00	
46	558.02	LONGITUDINAL SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE	1,350.00	S.Y.	\$10.00	\$13,500.00	
47	559.01	PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE, DECKS AND BRIDGE DECK OVERLAYS	11,740.00	S.F.	\$3.00	\$35,220.00	
48	559.02	PROTECTIVE SEALING OF NEW STRUCTURAL CONCRETE	7,060.00	S.F.	\$6.00	\$42,360.00	
49	564.510001	STRUCTURAL STEEL	250,803.00	LBS.	\$12.00	\$3,009,636.00	

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE**

Project ID: HBPED800Q
ePIN: 85023B0030

TOTAL BID PRICE: \$26,226,226.26

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Seq. No	Item Number	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
50	564.510002	STRUCTURAL STEEL	67,400.00	LBS.	\$12.00	\$808,800.00	
51	565.2022	TYPE E.B. FIXED BEARING (56K TO 111K)	21.00	EACH	\$9,500.00	\$199,500.00	
52	565.2023	Type E.B. Fixed Bearing (112 to 168 k)	14.00	EACH	\$10,000.00	\$140,000.00	
53	565.2032	TYPE E.B EXPANSION BEARING (56 TO 111 KIPS)	35.00	EACH	\$9,000.00	\$315,000.00	
54	565.2033	Type E.B. Expansion Bearing (112 to 168 k)	28.00	EACH	\$9,500.00	\$266,000.00	
55	567.60	ARMORLESS BRIDGE JOINT SYSTEM	300.00	FOOT	\$300.00	\$90,000.00	
56	568.81	PEDESTRIAN AND BICYCLE RAILING (TWO-RAIL)	410.00	L.F.	\$700.00	\$287,000.00	
57	569.02	PERMANENT CONCRETE TRAFFIC BARRIER FOR STRUCTURES (HALF SECTION)	410.00	L.F.	\$700.00	\$287,000.00	
58	569.03	VERTICAL FACED CONCRETE PARAPET	410.00	FOOT	\$700.00	\$287,000.00	
59	572.010002	STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	14,806.00	S.F.	\$20.00	\$296,120.00	
60	580.01	REMOVAL OF STRUCTURAL CONCRETE	1,100.00	C.Y.	\$1,700.00	\$1,870,000.00	
61	580.04	REMOVAL OF CONCRETE APPROACH SLAB	7,050.00	S.F.	\$15.00	\$105,750.00	
62	582.06	REMOVAL OF STRUCTURAL CONCRETE- REPLACEMENT WITH CLASS D CONCRETE	50.00	S.F.	\$150.00	\$7,500.00	
63	582.07	REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH VERTICAL AND OVERHEAD PATCHING MATERIAL	50.00	S.F.	\$150.00	\$7,500.00	
64	586.0201	DRILLING AND GROUTING BOLTS OR REINFORCEMENT BARS	3,500.00	EACH	\$70.00	\$245,000.00	
65	595.98200018	SPRAY APPLIED, WATERPROOF MEMBRANE	4,800.00	S.F.	\$6.00	\$28,800.00	
66	6.01 AA	CLEARING AND GRUBBING	1.00	L.S.	\$15,000.00	\$15,000.00	
67	6.02 AAN	UNCLASSIFIED EXCAVATION	3,460.00	C.Y.	\$100.00	\$346,000.00	
68	6.02 PA	PNEUMATIC EXCAVATION AROUND TREES	327.00	C.Y.	\$75.00	\$24,525.00	
69	6.02 PB	BACKFILLING AROUND TREES	122.00	C.Y.	\$75.00	\$9,150.00	
70	6.19 SBTf	FURNISHING AND INSTALLING STEEL BACKED TIMBER GUIDE RAIL WITH STEEL POSTS AND TIMBER BLOCK-OUTS	250.00	L.F.	\$300.00	\$75,000.00	
71	6.19 SBTg	FURNISHING AND INSTALLING APPROACH ANCHOR UNITS FOR STEEL BACKED TIMBER GUIDE RAIL WITH STEEL POSTS AND TIMBER BLOCK-OUTS	4.00	EACH	\$10,000.00	\$40,000.00	
72	6.24	ASPHALTIC CONCRETE SIDEWALK	2,050.00	S.F.	\$20.00	\$41,000.00	
73	6.25 RS	TEMPORARY SIGNS	290.00	S.F.	\$50.00	\$14,500.00	
74	6.26	TIMBER CURB	490.00	L.F.	\$25.00	\$12,250.00	
75	6.27	DEMOLITION OF STRUCTURES	1.00	L.S.	\$35,000.00	\$35,000.00	
76	6.28 AA	LIGHTED TIMBER BARRICADES	240.00	L.F.	\$10.00	\$2,400.00	
77	6.34 AC	CHAIN LINK FENCE, 6'-0" HIGH	35.00	L.F.	\$135.00	\$4,725.00	
78	6.34 AD	CHAIN LINK FENCE, 8'-0" HIGH	60.00	L.F.	\$160.00	\$9,600.00	
79	6.34 ADT	TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH	930.00	L.F.	\$65.00	\$60,450.00	
80	6.34 RXSR	REMOVE, STORE, AND REINSTALL EXPANDED METAL MESH FENCE	60.00	L.F.	\$275.00	\$16,500.00	
81	6.34 X	REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE	150.00	L.F.	\$35.00	\$5,250.00	
82	6.40 DU	ENGINEER'S FIELD OFFICE (JOINT USE) (TYPE DU)	42.00	MONTH	\$10,000.00	\$420,000.00	
83	6.43 D	DIGITAL PHOTOGRAPHS	500.00	SETS	\$15.00	\$7,500.00	
84	6.44	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	3,270.00	L.F.	\$1.00	\$3,270.00	
85	6.44 PR	PRIMER FOR PORTAND CEMENT CONCRETE PAVEMENTS	3,270.00	L.F.	\$1.00	\$3,270.00	
86	6.44 S	PAVEMENT MARKINGS - SYMBOLS	14.00	EACH	\$300.00	\$4,200.00	
87	6.49	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	840.00	L.F.	\$2.00	\$1,680.00	
88	6.50	CLEANING OF DRAINAGE STRUCTURES	5.00	EACH	\$1,000.00	\$5,000.00	
89	6.50 SG1	FURNISH AND INSTALL SLUICE GATE 6'-0" X 4'-0" OPENING	3.00	EACH	\$65,000.00	\$195,000.00	
90	6.50 TG1	FURNISH AND INSTALL TIDE GATE, TYPE A (7'-6" X 6'-8" OPENING)	5.00	EACH	\$65,000.00	\$325,000.00	
91	6.50 TG2	FURNISH AND INSTALL TIDE GATE, TYPE B (9'-2" X 6'-8" OPENING)	6.00	EACH	\$75,000.00	\$450,000.00	
92	6.50 TG3	FURNISH AND INSTALL TIDE GATE, TYPE C (9'-2" X 8'-8" OPENING)	6.00	EACH	\$80,000.00	\$480,000.00	
93	6.52 CG	CROSSING GUARD	4,000.00	P/HR	\$40.00	\$160,000.00	
94	6.55	SAWCUTTING EXISTING PAVEMENT	130.00	L.F.	\$5.00	\$650.00	
95	6.59 PF	TEMPORARY CONCRETE BARRIER WITH FENCE	1,299.00	L.F.	\$200.00	\$259,800.00	

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Project ID: HBPED800Q
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Seq. No	Item Number	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
96	6.64 BIN	BRIDGE IDENTIFICATION NUMBER SIGN (WALL MOUNTED)	1.00	EACH	\$500.00	\$500.00	
97	6.82 A	REMOVING EXISTING TRAFFIC AND STREET NAME SIGNS	50.00	S.F.	\$50.00	\$2,500.00	
98	6.82 B	REMOVING EXISTING TRAFFIC AND STREET NAME SIGN POSTS	100.00	L.F.	\$25.00	\$2,500.00	
99	6.82 RI	REMOVING, STORING, AND REINSTALLING EXISTING TRAFFIC AND STREET NAME SIGNS	75.00	S.F.	\$45.00	\$3,375.00	
100	6.83 AB	FURNISHING NEW TRAFFIC SIGN POSTS	50.00	L.F.	\$25.00	\$1,250.00	
101	6.83 AR	FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	50.00	S.F.	\$45.00	\$2,250.00	
102	6.83 BA	INSTALLING TRAFFIC SIGNS	50.00	S.F.	\$35.00	\$1,750.00	
103	6.83 BB	INSTALLING TRAFFIC SIGN POSTS	50.00	L.F.	\$30.00	\$1,500.00	
104	6.86 PISP	FURNISH AND INSTALL INTERPRETIVE SIGN PANEL (DPR)	1.00	EACH	\$300.00	\$300.00	
105	6.87	PLASTIC BARRELS	100.00	EACH	\$25.00	\$2,500.00	
106	6.91	REFLECTIVE CRACKING MEMBRANE (18" WIDE)	130.00	L.F.	\$5.00	\$650.00	
107	6.99	AUDIO AND VIDEO DOCUMENTATION SURVEY	1.00	L.S.	\$25,000.00	\$25,000.00	
108	60.11R606	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	15.00	L.F.	\$85.00	\$1,275.00	
109	60.12D06	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	15.00	L.F.	\$250.00	\$3,750.00	
110	60.25PSO	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE	2,000.00	LBS.	\$15.00	\$30,000.00	
111	60.41PSL20	PIPE REHABILITATION USING THE PRIMUS LINE	230.00	L.F.	\$800.00	\$184,000.00	
112	605.0901	UNDERDRAIN FILLER, TYPE 1	50.00	C.Y.	\$75.00	\$3,750.00	
113	605.1603	PERFORATED POLYVINYL CHLORIDE UNDERDRAIN PIPE, 8 INCH DIAMETER	370.00	L.F.	\$30.00	\$11,100.00	
114	607.91300004	WELDED WIRE FABRIC FENCE	1,580.00	S.F.	\$40.00	\$63,200.00	
115	607.93000011	WATERFOWL FENCE	1,150.00	L.F.	\$45.00	\$51,750.00	
116	609.0902	OPTIONAL CURB (PRECAST TYPE PM4 OR CAST-IN-PLACETYPE M4 OR STONE TYPE MT)	20.00	L.F.	\$100.00	\$2,000.00	
117	609.26520011	STEEL FACING FOR CURB ON STRUCTURE (NYC), TYPE D	410.00	L.F.	\$100.00	\$41,000.00	
118	61.11DFF20	FURNISHING AND DELIVERING 20-INCH FLANGED JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	EACH	\$40,000.00	\$80,000.00	
119	61.11DFM06	FURNISHING AND DELIVERING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	1.00	EACH	\$3,200.00	\$3,200.00	
120	61.12DFF20	SETTING 20-INCH FLANGED JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	EACH	\$1,600.00	\$3,200.00	
121	61.12DFM06	SETTING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	1.00	EACH	\$800.00	\$800.00	
122	62.11SD	FURNISHING AND DELIVERING HYDRANTS	1.00	EACH	\$6,500.00	\$6,500.00	
123	62.12SG	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	\$3,000.00	\$3,000.00	
124	62.14FS	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	2.00	EACH	\$600.00	\$1,200.00	
125	623.12	CRUSHED STONE (IN- PLACE MEASURE)	156.00	C.Y.	\$75.00	\$11,700.00	
126	63.11DR	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF WATER MAIN.	230.00	L.F.	\$25.00	\$5,750.00	
127	63.11MH	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS	1.00	TONS	\$5,000.00	\$5,000.00	
128	63.11MS	FURNISHING, DELIVERING AND INSTALLING MANHOLE STEPS TYPE PS2-PF	15.00	EACH	\$75.00	\$1,125.00	
129	63.11VC	FURNISHING AND DELIVERING VARIOUS CASTINGS	1.00	TONS	\$15,000.00	\$15,000.00	
130	634.18370029	INCIDENTAL REPAIRS	1.00	F.S.	\$435,000.00	\$435,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 435,000.00
131	65.41PS20	FURNISHING, DELIVERING AND INSTALLING 20-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	4.00	EACH	\$5,500.00	\$22,000.00	
132	65.51PC	FURNISHING AND PLACING CAST-IN-PLACE CONCRETE CLASS 40 AND PRECAST CONCRETE CLASS 50	18.00	C.Y.	\$900.00	\$16,200.00	

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Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Seq. No	Item Number	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
133	65.61SS	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL	1,697.00	LBS.	\$5.00	\$8,485.00	
134	65.71SG	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	4.00	C.Y.	\$75.00	\$300.00	
135	7.12 A	PROCTOR ANALYSIS	4.00	EACH	\$500.00	\$2,000.00	
136	7.12 B	IN-PLACE SOIL DENSITY TEST	12.00	EACH	\$900.00	\$10,800.00	
137	7.13 B	MAINTENANCE OF SITE	42.00	MONTH	\$7,000.00	\$294,000.00	Unit price bid shall not be less than: \$ 5,000.00
138	7.35	PEDESTRIAN CHANNELIZER	140.00	L.F.	\$5.00	\$700.00	
139	7.88 AD	WATERBUG BAIT APPLICATIONS	72.00	BLOCK	\$75.00	\$5,400.00	Unit price bid shall not be less than: \$ 75.00
140	7.96 A	ANTI-GRAFFITI COATING	7,400.00	S.F.	\$6.00	\$44,400.00	
141	73.31AE0	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)	40.00	C.Y.	\$20.00	\$800.00	Unit price bid shall not be less than: \$ 20.00
142	8.01 C1	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	2,700.00	TONS	\$130.00	\$351,000.00	Unit price bid shall not be less than: \$ 126.00
143	8.01 C2	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	6.00	SETS	\$3,000.00	\$18,000.00	Unit price bid shall not be less than: \$ 2,949.00
144	8.01 H	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	300.00	TONS	\$590.00	\$177,000.00	Unit price bid shall not be less than: \$ 590.00
145	8.01 S	HEALTH AND SAFETY	1.00	L.S.	\$9,000.00	\$9,000.00	Unit price bid shall not be less than: \$ 300.00
146	8.01 W1	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	5.00	DAY	\$2,510.00	\$12,550.00	Unit price bid shall not be less than: \$ 2,506.00
147	8.01 W2	SAMPLING AND TESTING OF CONTAMINATED WATER	5.00	SETS	\$3,000.00	\$15,000.00	Unit price bid shall not be less than: \$ 2,064.00
148	8.53 BFR	BRIDGE FLAG REPAIR	1.00	F.S.	\$250,000.00	\$250,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 250,000.00
149	9.10 TES	TEMPORARY EXCAVATION SUPPORT SYSTEM	2,300.00	S.F.	\$75.00	\$172,500.00	
150	9.23	PRICE ADJUSTMENTS	1.00	F.S.	\$150,000.00	\$150,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00
151	9.30	STORM WATER POLLUTION PREVENTION	1.00	L.S.	\$76,733.00	\$76,733.00	
152	9.71 WBB	VIBRATION MONITORING OF EXISTING BUILDINGS	1.00	L.S.	\$50,000.00	\$50,000.00	
153	9.99 AM	FLASHING ARROW BOARD WITH IMPACT ATTENUATOR	6.00	MONTH	\$3,100.00	\$18,600.00	
154	9.99 M	FLASHING ARROW BOARD	18.00	MONTH	\$1,100.00	\$19,800.00	
155	E 260501	DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT	1.00	L.S.	\$14,000.00	\$14,000.00	
156	E 260519 A	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 3/0 AWG WIRE)	500.00	L.F.	\$30.00	\$15,000.00	
157	E 260519 D	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 6 AWG WIRE)	4,500.00	L.F.	\$6.00	\$27,000.00	
158	E 260519 E	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 8 AWG WIRE)	1,500.00	L.F.	\$5.00	\$7,500.00	
159	E 260519 F	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 12 AWG WIRE)	7,200.00	L.F.	\$4.00	\$28,800.00	
160	E 260523 A	#14 AWG CONTROL CABLE	13,400.00	L.F.	\$3.00	\$40,200.00	
161	E 260526	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	150.00	L.F.	\$40.00	\$6,000.00	
162	E 260526 D	GROUND RODS	4.00	EACH	\$500.00	\$2,000.00	
163	E 260529	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	12.00	EACH	\$1,700.00	\$20,400.00	
164	E 260533 D	BOXES FOR ELECTRICAL SYSTEMS	3.00	EACH	\$13,500.00	\$40,500.00	
165	E 260533 A1.0	METAL CONDUIT AND TUBING (1" GALVANIZED RIGID STEEL CONDUIT)	1,680.00	L.F.	\$57.00	\$95,760.00	
166	E 260533 AC2.0	METAL CONDUIT AND TUBING (2" GALVANIZED RIGID STEEL CONDUIT)	905.00	L.F.	\$80.00	\$72,400.00	
167	E 260533 AC2.5	METAL CONDUIT AND TUBING (2-1/2" GALVANIZED RIGID STEEL CONDUIT)	30.00	L.F.	\$135.00	\$4,050.00	
168	E 260533 EN	ENCLOSURE, 72"x72"x12"	1.00	EACH	\$12,500.00	\$12,500.00	
169	E 260533 P1.5	RIGID NON-METALLIC CONDUIT (1 1/2" PVC SCHEDULE 40 CONDUIT)	30.00	L.F.	\$32.00	\$960.00	
170	E 260533 P2.0	RIGID NON-METALLIC CONDUIT (2" PVC SCHEDULE 40 CONDUIT)	1,600.00	L.F.	\$30.00	\$48,000.00	
171	E 260543 A	DUCTBANK WITH NINE(9) 2" CONDUITS AND ONE (1) 1" CONDUIT UNDER ROADWAY	200.00	L.F.	\$170.00	\$34,000.00	
172	E 260543 B	DUCTBANK WITH TWO (2) 2" CONDUITS UNDER ROADWAY	160.00	L.F.	\$80.00	\$12,800.00	
173	E 261213	LIQUID-FILLED PAD-MOUNT TRANSFORMER	1.00	EACH	\$8,000.00	\$8,000.00	
174	E 262416 E	SEALED UNIT SUBSTATION	1.00	EACH	\$75,000.00	\$75,000.00	
175	E 262416 F	PANELBOARDS, (1) 100A 3P, (5) 30A 3P, (3) 20A 2P	1.00	EACH	\$62,000.00	\$62,000.00	

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176	E 263600	MANUAL TRANSFER SWITCH	1.00	EACH	\$35,000.00	\$35,000.00	
177	E 264160	GENERATOR RECEPTACLE	1.00	EACH	\$7,000.00	\$7,000.00	
178	E 409543 A	PROGRAMMABLE LOGIC CONTROLLER	1.00	EACH	\$50,000.00	\$50,000.00	
179	E 409543 B	IO CARDS	4.00	EACH	\$1,450.00	\$5,800.00	
180	E 409543 C	PANEL DEVICES	1.00	L.S.	\$200,000.00	\$200,000.00	
181	HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	1.00	F.S.	\$300,000.00	\$300,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 300,000.00
182	HW-907	ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT	1.00	F.S.	\$100,000.00	\$100,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 100,000.00
183	HW-908	ALLOWANCE FOR EXTRA WORK DUE TO ARCHAEOLOGICAL DISCOVERIES	1.00	F.S.	\$10,000.00	\$10,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 10,000.00
184	JB-FS-CE	CON EDISON JB FIXED SUM	1.00	F.S.	\$742,749.55	\$742,749.55	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 742,749.55
185	JB-FS-VZ	ECS-VERIZON JB FIXED SUM	1.00	F.S.	\$99,820.00	\$99,820.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 99,820.00
186	PK-643	MAINTENANCE, PROTECTION AND INSTALLATION OF NYCDPR FACILITIES	1.00	L.S.	\$25,000.00	\$25,000.00	
187	SL-20.01.02	FURNISH AND INSTALL FOUNDATION FOR TYPE "WF" LAMPOST, AS PER DRAWING FDN-005	2.00	EACH	\$900.00	\$1,800.00	
188	SL-20.03.04	FURNISH AND INSTALL FOUNDATION ON WALL OR PARAPET, AS PER DRAWING FDN-025	2.00	EACH	\$1,500.00	\$3,000.00	
189	SL-20.08.01	REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	4.00	EACH	\$510.00	\$2,040.00	
190	SL-20.08.03	REMOVE PORTION OF A CONCRETE FOUNDATION. USE THIS ITEM WHERE LAMPOST LOCATION IS BEING ABANDONED.	2.00	EACH	\$275.00	\$550.00	
191	SL-21.01.09	FURNISH AND INSTALL "WF" LAMPOST WITHOUT TRANSFORMER BASE.	2.00	EACH	\$3,800.00	\$7,600.00	
192	SL-21.03.02	FURNISH AND INSTALL TYPE 8S LAMPOST WITH TRANSFORMER BASE	4.00	EACH	\$3,800.00	\$15,200.00	
193	SL-21.05.04	FURNISH AND INSTALL SPUN ALUMINUM LAMPOST WITH 8 FOOT FOOT ARM, WITH TRANSFORMER BASE AS PER DWG LP-013	2.00	EACH	\$3,400.00	\$6,800.00	
194	SL-21.09.01	REMOVE PARK TYPE LAMPOST ON FOUNDATION, WITH ALL ATTACHMENTS, IF ANY.	2.00	EACH	\$700.00	\$1,400.00	
195	SL-21.09.05	REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	4.00	EACH	\$850.00	\$3,400.00	
196	SL-22.15.07	Furnish and install type "2085" LED Luminaire LUM-004 AND SPEC # 465	3.00	EACH	\$1,100.00	\$3,300.00	
197	SL-22.16.05	FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE LUM-001	8.00	EACH	\$500.00	\$4,000.00	
198	SL-26.01.04	FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE WITH SURGE PROTECTION FOR LED LIGHT AS PER SPEC# 504	9.00	EACH	\$210.00	\$1,890.00	
199	SL-27.01.01	FURNISH AND INSTALL VERTICAL ALUMINUM TAG ON A LAMPOST, AS PER DRAWING SL-MIS-004	2.00	EACH	\$280.00	\$560.00	
200	SL-28.01.02	FURNISH AND INSTALL COPPER WELD GROUND ROD AND CLAMP IN ROADWAY BOX, AS PER DRAWING SL-MIS-013	2.00	EACH	\$180.00	\$360.00	
201	SL-29.01.01	FURNISH, INSTALL, MAINTAIN AND REMOVE EQUIPMENT FOR TEMPORARY LIGHTING (PYLON), AS PER DRAWINGS F-5005 AND F-5005A	4.00	EACH	\$5,200.00	\$20,800.00	
202	SL-33.01.01	FURNISH AND INSTALL NO. 12 AWG XLP COPPER WIRE OR EQUAL IN CONDUIT	500.00	L.F.	\$8.00	\$4,000.00	
203	SL-33.01.02	FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	500.00	L.F.	\$10.00	\$5,000.00	
204	SL-33.01.03	FURNISH AND INSTALL NO. 2 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	200.00	L.F.	\$11.00	\$2,200.00	
205	SL-33.01.10	REMOVE CONDUCTORS FROM EXISTING CONDUITS OR DUCTS	1,500.00	L.F.	\$12.00	\$18,000.00	
206	SL-33.03.01	FURNISH AND INSTALL #6 BARE COPPER CONDUCTOR IN CONDUIT OR OVERHEAD.	500.00	L.F.	\$15.00	\$7,500.00	
207	SL-35.01.03	FURNISH AND INSTALL 1-1/2" HOT DIPPED GALVANIZED STEEL CONDUIT IN PAVED AREA.	50.00	L.F.	\$55.00	\$2,750.00	
208	SL-35.01.04	FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN PAVED AREA	200.00	L.F.	\$65.00	\$13,000.00	
209	SL-35.05.03	FURNISH AND INSTALL 1-1/2" HOT DIPPED GALVANIZED STEEL CONDUIT IN OPEN TRENCH AREA.	200.00	L.F.	\$55.00	\$11,000.00	
210	SL-37.04.04	FURNISH AND INSTALL A CAST IRON BOX UP TO 5184 CUBIC INCHES MAXIMUM MOUNTED ON STRUCTURE BOX-003	2.00	EACH	\$6,000.00	\$12,000.00	
211	SL-37.05.09	FURNISH AND INSTALL TYPE 2418 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG BOX-001.	2.00	EACH	\$8,000.00	\$16,000.00	

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE**

Project ID: HBPED800Q
ePIN: 85023B0030

TOTAL BID PRICE: \$26,226,226.26

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Seq. No	Item Number	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Extended Amount	Price Criteria
212	SL-39.01.01	FURNISH ALL LABOR, MATERIAL AND EQUIPMENT TO DISCONNECT ENERGY SUPPLY TO A LAMP, ON A LAMPPPOST.	7.00	EACH	\$150.00	\$1,050.00	
213	SL-39.01.02	FURNISH ALL LABOR, MATERIAL AND EQUIPMENT TO CONNECT ENERGY SUPPLY TO A LAMP, ON A LAMPPPOST.	7.00	EACH	\$170.00	\$1,190.00	
		SUBTOTAL				\$24,476,226.26	
214	6.39 B	MOBILIZATION	1.00	L.S.	\$1,750,000.00	\$1,750,000.00	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 8% OF THE ABOVE SUB-TOTAL PRICE.

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
JB SPECIALTY ITEMS**

Project ID: HBPED800Q
ePIN: 85023B0030

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Seq. No	JB Fixed Sum Items	Item Number	Item Description	Engineer's Estimate of Quantity	Unit	Unit Price	Price Criteria
1	JB-FS-CE	JB 950E	INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES	1	L.S.	380000	Unit bid price shall not be less than: \$380,000.00
2	JB-FS-VZ	JB 950T	MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES	1	L.S.	100000	Unit bid price shall not be less than: \$100,000.00

Prices bid for these items will be paid for under the respective JB Fixed Sum items in the Bid Schedule.

Pre-Award Process

The bidder is advised that as part of the pre-award review of its bid, it may be required to submit the information described in Sections (A) through (D) below. If required, the bidder must submit such information within five (5) business days following receipt of notification from DDC that it is among the low bidders. Such notification from DDC will be by email and will specify the types of information which must be submitted directly to DDC.

In the event the bidder fails to submit the required information within the specified time frame, its bid may be rejected as nonresponsive.

- (A) **Project Reference Form:** If required, the bidder must complete and submit the Project Reference Form set forth in this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.
- (B) **Copy of License:** If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.
- (C) **Financial Information:** If required, the bidder must submit the financial information described below:
 - (1) **Audited Financial Statements:** Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.

If the bidder does not have audited financial statements, it must submit an affidavit attesting to the fact that the bidder does not have such statements. In addition, the bidder must submit the following documentation covering the three most recent fiscal years: signed federal tax returns, unaudited financial statements, and a "certified review letter" from a certified public accountant (CPA) verifying the unaudited financial statements.

Unless the most recent audited or unaudited financial statement was issued within ninety (90) days, the bidder must submit interim financial information that includes data on financial position and results of operation (income data) for the current fiscal year. Such information may be summarized on a monthly or quarterly basis or at other intervals.

- (2) **Schedule of Aged Accounts Receivable,** including portion due within ninety (90) days.

(D) **Project Specific Information:** If required, the bidder must submit the project specific information described below:

- (1) Statement indicating the number of years of experience the bidder has had and in what type of construction.
- (2) Resumes of all key personnel to be involved in the project, including the proposed project superintendent.
- (3) List of significant pieces of equipment expected to be used for the contract, and whether such equipment is owned or leased.
- (4) Description of work expected to be subcontracted, and to what firms, if known.
- (5) List of key material suppliers.
- (6) Preliminary bar chart time schedule
- (7) Contractor's expected means of financing the project. This should be based on the assumption that the contractor is required to finance 2X average monthly billings throughout the contract period.
- (8) Any other issues the contractor sees as impacting his ability to complete the project according to the contract.

In addition to the information described in Sections (A) through (D) above, the bidder shall submit such additional information as the Commissioner may require, including without limitation, an explanation or justification for specific unit price items.

The bidder is further advised that it may be required to attend a pre-award meeting with DDC representatives. If such a meeting is convened, the bidder will be advised as to any additional material to be provided.

A.L.A.C. Contracting Corp.

A. PROJECT REFERENCES - SIMILAR CONTRACTS COMPLETED BY THE BIDDER

List all contracts substantially completed within the last 4 years similar to the contract being awarded, up to a maximum of 10, in descending order of date of substantial completion.

Project & Location	Contract Type	Contract Amount (\$000)	Date Completed	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. if different from owner
WP-169 ALLEY CREEK DRAINAGE, QUEENS CONSTRUCTION OF STORM/SANITARY SEWER, & WATER MAIN & WATER FACILITIES	G.C.	100,153,794.25	October 16, 2007	RAY MESHKATI, P.E. (718) 595-6123	NEW YORK CITY DEPT OF ENVIRONMENTAL PROTECTION
HWQP171-RR RECONSTRUCTION OF 54TH AVE. ETC. BOROUGH OF QUEENS	G.C.	15,115,115.15	December 15, 2009	FRANCO MESITI, E.I.C. (718)365-1557	NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
R-149 INSTALLATION OF NATURAL GAS SVC & REMOVAL OF UNDERGROUND PETROLEUM BULK STORAGE TANKS ROCKAWAY, QUEENS	G.C.	5,111,111.11	February 1, 2013	RAY MESHKATI, P.E. (718)595-6123	NEW YORK CITY DEPT OF ENVIRONMENTAL PROTECTION
SER002313 CONSTRUCTION OF STORM & SANITARY SEWERS & APPURTANCES IN MCBAINE AVENUE STATEN ISLAND, NY	G.C.	19,502,800.00	December 1, 2013	MARWAN HAMDI (917) 444-2843	NEW YORK CITY DEPT OF DESIGN AND CONSTRUCTION
H6179A01G and H617902GR WEST SHORE ROAD - SEAWALL IMPROVEMENTS - PHASES I AND II	G.C.	18,000,000.00	October 2015	DONNA BOYLE (516)571-6804	NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

NASSAU COUNTY					
D262500 BRIDGE REHABILITATION OF PATCHOGUE RD. OVER THE LOND ISLAND EXPRESSWAY	G.C.	10,00,000.00	September 2017	JOHN CONNOR (631)952-6041	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
D262794 ASPHALT CONCRETE RECONSTRUCTION ON NY ROUTE 112, 1.7 MILES	G.C.	16,000,000.00	October 2017	JIM DEERKOWSKI (516)571-6804	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
D262897 I-495, LONG ISLAND EXPRESSWAY REHABILITATION OF ELEVEN BRIDGES	G.C.	18,181,818.18	JUNE 2018	EDMUND DONOVAN (631)448-7297	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
SE851 CONSTRUCTION OF STORM, COMBINED, SANITARY SEWER, WATER MAIN & APPURTENANCES	G.C.	56,556,556.56	SEPTEMBER 2019	LOUIS JUSMA (718) 975-8150	NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
CONISICONISPH2B - CONEY ISLAND STORM STORM, SANITARY SEWERS WATER WATER MAIN IN CONEY ISLANE ISLAND AREA - PH2B	G.C.	44,443,446.44	JUNE 2022	PETER GEORGY (732) 261-3922	NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
SEQ200596 - HOLLIS, QUEENS REPLACEMENT OF STORM SEWER IN 183RD STREET BETWEEN 90TH AVENUE AND JAMAICA AVENUE	G.C.	11,000,000.00	SEPTEMBER 2022	EMMANUAL CHARLES (718) 391-1450	NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION

B. Contracts currently under construction by the bidder

List all contracts currently under construction even if they are not similar to the contract being awarded.

Project & Location	Contract Type	Contract Amount (\$000)	Subcontracted to Others (\$000)	Uncompleted Portion (\$000)	Date Scheduled to Complete	Owner Reference & Tel. No.	Architect/ Engineer Reference & Tel. No. (if different from owner)
Major infrastructure Phase II Flood Protect Warwick Drainage Area	GC	24,124,124.24	TBD	17,000,000	11/24	Village of Island Park 516-421-0600	Cameron Engineering 516-827-4900

C. Pending contracts not yet started by the bidder

List all contracts awarded to or won by the bidder but not yet started.

Project & Location	Contract Type	Contract Amount (\$000)	Date Scheduled to Start	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. (if different from owner)
Kings Park Downtown Sewers Kings Park, NY	GC	20,900,000	4/1/23	4/1/25	H2M 631-756-8000



**Department of
Design and
Construction**

**THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND
CONSTRUCTION
DIVISION OF INFRASTRUCTURE**
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY, 11101
TEL: 718.391.1000
WEB: www.nyc.gov/ddc

TO BE FILLED IN BY THE BIDDER:

BIDDER'S NAME:

BID SECURITY (CIRCLE ONE):
BID BOND / CERTIFIED CHECK

NUMBER OF ADDENDUMS RECEIVED
AND ATTACHED TO BID:
_____ ADDENDUMS

DDC CLIENT AGENCY:
DEPARTMENT OF TRANSPORTATION
PREPARED BY:
URS CORPORATION
DATE PREPARED:
FEBRUARY 3, 2022



VOLUME 2 OF 3

FOR FURNISHING ALL LABOR AND MATERIALS
NECESSARY AND REQUIRED FOR:

PROJECT ID: HBPED800Q

**INFORMATION FOR BIDDERS
CONTRACT
PERFORMANCE AND PAYMENT BONDS
PREVAILING WAGE SCHEDULE**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY
AND REQUIRED FOR:

**RECONSTRUCTION OF
TIDE GATE BRIDGE OVER FLUSHING CREEK**

B.I.N. 2-27069-0

TOGETHER WITH ALL WORK INCIDENTAL THERETO

**BOROUGH OF QUEENS
CITY OF NEW YORK**

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFORMATION FOR BIDDERS
December 2021

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CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFORMATION FOR BIDDERS

TABLE OF CONTENTS

1.	Description and Location of Work	1
2.	Time and Place for Receipt of Bids	1
3.	Definitions	1
4.	Invitation For Bids and Contract Documents	1
5.	Pre-Bid Conference	1
6.	Agency Contact	1
7.	Bidder's Oath	1
8.	Examination and Viewing of Site, Consideration of Other Sources of Information and Changed Conditions	2
9.	Examination of Proposed Contract	2
10.	Form of Bid	2
11.	Irrevocability of Bid	3
12.	Acknowledgment of Amendments	3
13.	Bid Samples and Descriptive Literature	3
14.	Proprietary Information/Trade Secrets	3
15.	Pre-Opening Modification or Withdrawal of Bids	3
16.	Bid Evaluation and Award	3
17.	Late Bids, Late Withdrawals and Late Modifications	3
18.	Withdrawal of Bids.	3
19.	Mistake in Bids	4
20.	Low Tie Bids	4
21.	Rejection of Bids	5
22.	Right to Appeal Determinations of Non-Responsiveness or Non-Responsibility and Right to Protest Solicitations and Award	5
23.	Affirmative Action and Equal Employment Opportunity	5
25.	Complaints About the Bid Process	6
26.	Bid, Performance and Payment Security	6
27.	Failure to Execute Contract	7
28.	Bidder Responsibilities and Qualifications	7
29.	Employment Report	7
30.	Labor Law Requirements	8
31.	Insurance	8
32.	Lump Sum Contracts	8
33.	Unit Price Contracts	8

34.	Excise Tax	9
35.	Licenses and Permits	9
36.	Multiple Prime Contractors	9
37.	Locally Based Enterprise Requirements (LBE)	9
38.	Bid Submission Requirements	11
39.	Comptroller's Certificate	11
40.	Procurement Policy Board Rules	11
41.	DDC Safety Requirements	11

1. Description and Location of Work

The description and location of the work for which bids are requested are specified in the PASSPort RFX field "Description".

2. Time and Place for Receipt of Bids

Sealed bids shall be received on or before the date and hour specified in the PASSPort RFX, at which time they will be publicly opened and read aloud in the presence of the Commissioner or the Commissioner's or her representative, and any bidders who may desire to be present.

3. Definitions

The definitions set forth in the Procurement Policy Board Rules shall apply to this Invitation For Bids.

4. Invitation For Bids and Contract Documents

(A) Except for titles, sub-titles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience) the following, except for such portions thereof as may be specifically excluded, shall be deemed to be part of the Contract and the Invitation for Bids.

- (1) All provisions required by law to be inserted in this Contract, whether actually inserted or not
- (2) The Contract Drawings and Specifications
- (3) The General Conditions, the General Requirements and the Special Conditions, if any
- (4) The Contract
- (5) The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and the Bid Booklet
- (6) The Budget Director's Certificate; all Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed with the Work.

(B) For particulars as to this procurement, including quantity and quality of the purchase, extent of the work or labor to be performed, delivery and performance schedule, and any other special instructions, prospective bidders are referred to the Invitation For Bids Documents. A copy of such documents can be obtained in the PASSPort RFX.

5. Pre-Bid Conference

A pre-bid conference shall be held as set forth in the PASSPort RFX. Nothing stated at the pre-bid conference shall change the terms or conditions of the Invitation For Bids Documents, unless a change is made by written amendment as provided in Section 9 below. Failure to attend a mandatory pre-bid conference shall constitute grounds for the rejection of the bid.

6. Agency Contact

Any questions or correspondence relating to this bid solicitation shall be addressed to the Agency Contact person specified in the PASSPort RFX.

7. Bidder's Oath

- (A) The bid shall be properly signed by an authorized representative of the bidder and the bid shall be verified by the written oath of the authorized representative who signed the bid, that the several matters stated and information furnished therein are in all aspects true.
- (B) A materially false statement willfully or fraudulently made in connection with the bid or any of the forms completed and submitted with the bid may result in the termination of any Contract between the City and the Bidder. As a result, the Bidder may be barred from participating in future City contracts as well as be subject to possible criminal prosecution.

8. Examination and Viewing of Site, Consideration of Other Sources of Information and Changed Conditions

- (A) Pre-Bidding (Investigation) Viewing of Site - Bidders must carefully view and examine the site of the proposed work, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions on, about or above the site relating to or affecting in any way the performance of the work to be done under the Contract which were or should have been indicated to a reasonably prudent bidder. To arrange a date for visiting the work site, bidders are to contact the Agency Contact person specified in The PASSPort RFx.
- (B) Should the contractor encounter during the progress of the work subsurface conditions at the site materially differing from any shown on the Contract Drawings or indicated in the Specifications or such subsurface conditions as could not reasonably have been anticipated by the contractor and were not anticipated by the City, which conditions will materially affect the cost of the work to be done under the Contract, the attention of the Commissioner must be called immediately to such conditions before they are disturbed. The Commissioner shall thereupon promptly investigate the conditions. If the Commissioner finds that they do so materially differ, or that they could not reasonably have been anticipated by the contractor and were not anticipated by the City, the Contract may be modified with the Commissioner's written approval.

9. Examination of Proposed Contract

- (A) Request for Interpretation or Correction: Prospective bidders must examine the Contract Documents carefully and before bidding must request the Commissioner in writing for an interpretation or correction of every patent ambiguity, inconsistency or error therein which should have been discovered by a reasonably prudent bidder. Such interpretation or correction, as well as any additional contract provisions the Commissioner may decide to include, will be issued in writing by the Commissioner as an addendum to the Contract, which will be transmitted to each person recorded as having received a copy of the Contract Documents from the Department. Transmission of such addendum will be by mail, e-mail, facsimile or hand delivery. Such addendum will also be posted at the place where the Contract Documents are available for the inspection of prospective bidders. Upon transmission as provided for herein, such addendum shall become a part of the Contract Documents, and binding on all bidders, whether or not actual notice of such addendum is shown.
- (B) Only Commissioner's Interpretation or Correction Binding: Only the written interpretation or correction so given by the Commissioner shall be binding, and prospective bidders are warned that no other officer, agent or employee of the City is authorized to give information concerning, or to explain or interpret, the Contract.
- (C) Documents given to a subcontractor for the purpose of soliciting the subcontractor's bid shall include either a copy of the bid cover sheet or a separate information sheet setting forth the project name, the Contract number (if available), the contracting agency and the Project's location.

10. Form of Bid

Each bid must be submitted upon the prescribed form and must contain: a) the name, residence and place of business of the person or persons making the same; b) the names of all persons interested therein, and if no other person is so interested, such fact must be distinctly stated; c) a statement to the effect that it is made without any connection with any other person making a bid for the same purpose and that it is in all respects fair and without collusion or fraud; d) a statement that no Council member or other officer or employee or person whose salary is payable in whole or part from the City Treasury is directly or indirectly interested therein or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof; e) a statement that the bidder is not in arrears to the City or to any agency upon a debt or contract or taxes, and is not a defaulter as surety or otherwise upon any obligation to the City to any agency thereof, except as set forth in the bid.

THE BID SHALL BE TYPEWRITTEN OR WRITTEN LEGIBLY IN INK. THE BID SHALL BE SIGNED IN INK. ERASURES OR ALTERATIONS SHALL BE INITIALED BY THE SIGNER IN INK. FAILURE TO CONFORM TO THE REQUIREMENTS OF THIS SECTION 10 SHALL RESULT IN THE REJECTION OF THE BID.

11. Irrevocability of Bid

The prices set forth in the bid cannot be revoked and shall be effective until the award of the Contract, unless the bid is withdrawn as provided for in Sections 15 and 18 below.

12. Acknowledgment of Amendments

The receipt of any amendment to the Contract Documents shall be acknowledged by the bidder in its bid submission.

13. Bid Samples and Descriptive Literature

Bid samples and descriptive literature shall not be submitted by the bidder, unless expressly requested elsewhere in the Contract or Contract Documents. Any unsolicited bid samples or descriptive literature which are submitted shall not be examined or tested and shall not be deemed to vary any of the provisions of this Contract.

14. Proprietary Information/Trade Secrets

- (A) The bidder shall identify those portions of the bid which it deems to be confidential, proprietary information or trade secrets, and provide justification why such materials shall not be disclosed by the City. All such materials shall be clearly indicated by stamping the pages on which such information appears, at the top and bottom thereof with the word "Confidential". Such materials stamped "Confidential" must be easily separable from the non-confidential sections of the bid.
- (B) All such materials so indicated shall be reviewed by the Agency and any decision not to honor a request for confidentiality shall be communicated in writing to the bidder. For those bids which are unsuccessful, all such confidential materials shall be returned to the bidder. Prices, makes and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available after bid opening, regardless of any designation of confidentiality made by the bidder.

15. Pre-Opening Modification or Withdrawal of Bids

Bids may be modified or withdrawn by written notice received in the office designated in the PASSPort RFx, before the time and date set for the bid opening. If a bid is withdrawn in accordance with this Section, the bid security, if any, shall be returned to the bidder.

16. Bid Evaluation and Award

In accordance with the New York City Charter, the Procurement Policy Board Rules and the terms and conditions of this Invitation For Bids, this Contract shall be awarded, if at all, to the responsible bidder whose bid meets the requirements and evaluation criteria set forth in the Invitation For Bids, and whose bid price is either the most favorable bid price or, if the Invitation For Bids so states, the most favorable evaluated bid price. A bid may not be evaluated for any requirement or criterion that is not disclosed in the Invitation For Bids.

Restriction: No negotiations with any bidder shall be allowed to take place except under the circumstances and in the manner set forth in Section 21. Nothing in this Section shall be deemed to permit a contract award to a bidder submitting a higher quality item than that designated in the Invitation For Bids, if that bid is not also the most favorable bid.

17. Late Bids, Late Withdrawals and Late Modifications

Any bid received at the place designated in the solicitation after the time and date set for receipt of bids is late and shall not be considered. Any request for withdrawal or modification received at the place designated in the solicitation after the time and date set for receipt of bids is late and shall not be considered. The exception to this provision is that a late modification of a successful bid that makes the bid terms more favorable to the City shall be considered at any time it is received.

18. Withdrawal of Bids.

Except as provided for in Section 15, above, a bidder may not withdraw its bid before the expiration of forty-five (45) days after the date of the opening of bids; thereafter, a bidder may withdraw its bid only in writing and in advance of an actual award. If within sixty (60) days after the execution of the Contract, the Commissioner fails to fix the date

for commencement of work by written notice to the bidder, the bidder at the bidder's option, may ask to be relieved of the bidder's obligation to perform the work called for by written notice to the Commissioner. If such notice is given to the Commissioner, and the request to withdraw is granted, the bidder waives all claims in connection with this Contract.

19. Mistake in Bids

(A) Mistake Discovered Before Bid Opening: A bidder may correct mistakes discovered before the time and date set for bid opening by withdrawing or correcting the bid as provided in Section 15 above.

(B) Mistakes Discovered Before Award

(1) In accordance with General Municipal Law (Section 103, subdivision 11), where a unilateral error or mistake is discovered in a bid, such bid may be withdrawn upon written approval of the Agency Chief Contracting Officer if the following conditions are met:

(a) The mistake is known or made known to the agency prior to the awarding of the Contract or within 3 days after the opening of the bid, whichever period is shorter; and

(b) The price bid was based upon an error of such magnitude that enforcement would be unconscionable; and

(c) The bid was submitted in good faith and the bidder submits credible evidence that the mistake was a clerical error as opposed to a judgment error; and

(d) The error in the bid is actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of the original work paper, documents, or materials used in the preparation of the bid sought to be withdrawn; and

(e) It is possible to place the agency in the same position as existed prior to the bid.

(2) Unless otherwise required by law, the sole remedy for a bid mistake in accordance with this Article shall be withdrawal of the bid, and the return of the bid bond or other security, if any, to the bidder. Thereafter, the agency may, in its discretion, award the Contract to the next lowest bidder or rebid the Contract. Any amendment to or reformation of a bid or a Contract to rectify such an error or mistake therein is strictly prohibited.

(3) If the mistake and the intended correct bid are clearly evident on the face of the bid document, the bid shall be corrected to the intended correct bid and may not be withdrawn. Examples of mistakes that may be corrected are typographical errors, errors in extending unit prices, transposition errors and arithmetical errors.

20. Low Tie Bids

(A) When two or more low responsive bids from responsible bidders are identical in price, meeting all the requirements and criteria set forth in the Invitation For Bids, the Agency Chief Contracting Officer will break the tie in the following manner and order of priority:

(1) Award to a certified New York City small, minority or woman-owned business entity bidder;

(2) Award to a New York City bidder;

(3) Award to a certified New York State small, minority or woman-owned business bidder;

(4) Award to a New York State bidder.

(B) If two or more bidders still remain equally eligible after application of paragraph (A) above, award shall be made by a drawing by lot limited to those bidders. The bidders involved shall be invited to attend the drawing. A witness shall be present to verify the drawing and shall certify the results on the bid tabulation sheet.

21. Rejection of Bids

- (A) **Rejection of Individual Bids**: The Agency may reject a bid if:
- (1) The bidder fails to furnish any of the information required pursuant to Section 24 or 28 hereof; or if
 - (2) The bidder is determined to be not responsible pursuant to the Procurement Policy Board Rules; or if
 - (3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board Rules; or if
 - (4) The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid prices and is thus non-responsive, unless the bidder can show that the prices are not unbalanced for the probable required quantity of items, or if the imbalance is corrected pursuant to Section 15.
- (B) **Rejection of All Bids**: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.
- (C) **Rejection of All Bids and Negotiation With All Responsible Bidders**: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:
- (1) All otherwise acceptable bids received are at unreasonable prices, or only one bid is received and the Agency Chief Contracting Officer cannot determine the reasonableness of the bid price, or no responsive bid has been received from a responsible bidder; or
 - (2) In the judgment of the Agency Chief Contracting Officer, the bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith.
- (B) When the Agency has determined that the Invitation for Bids is to be canceled and that use of negotiation is appropriate to complete the acquisition, the contracting officer may negotiate and award the Contract without issuing a new solicitation, subject to the following conditions:
- (1) prior notice of the intention to negotiate and a reasonable opportunity to negotiate have been given by the contracting officer to each responsible bidder that submitted a bid in response to the Invitation for Bids;
 - (2) the negotiated price is the lowest negotiated price offered by a responsible bidder; and
 - (3) the negotiated price is lower than the lowest rejected bid price of a responsible bidder that submitted a bid in response to the Invitation for Bids.

22. Right to Appeal Determinations of Non-Responsiveness or Non-Responsibility and Right to Protest Solicitations and Award

The bidder has the right to appeal a determination of non-responsiveness or non-responsibility and has the right to protest a solicitation and award. For further information concerning these rights, the bidder is directed to the Procurement Policy Board Rules.

23. Affirmative Action and Equal Employment Opportunity

This Invitation For Bids is subject to applicable provisions of Federal, State and Local Laws and executive orders requiring affirmative action and equal employment opportunity.

24. PASSPort COMPLIANCE

All vendors that intend to do business with the City of New York must complete a disclosure process in order to be considered for a contract. This disclosure process was formerly completed using Vendor Information Exchange System (VENDEX) paper-based forms. The City of New York has moved collection of vendor disclosure information online. In early August 2017, the New York City Mayor's Office of Contract Services (MOCS) launched the Procurement and Sourcing Solutions Portal (PASSPort), a new online procurement system that replaced the paper-VENDEX process. In anticipation of awards, all bidders must create online accounts in the new PASSPort system, and

file all disclosure information using PASSPort. Paper submissions, including certifications of no changes to existing VENDEX packages, will not be accepted in lieu of complete online filings using PASSPort.

All vendors that intend to do business with the City, but specifically those that fall into any of the following categories, are required to enroll:

- Have a pending award with a City Agency; or
- Hold a current contract with a City Agency and have either an expiring VENDEX or expiring Certificate of No Change.

The Department of Design and Construction (DDC) and MOCS hereby notifies all proposers that the PASSPort system is available, and that disclosure filing completion is required prior to any award through this competitive bid.

To enroll in PASSPort and to access the PASSPort website (including online training), please visit www.nyc.gov/passport. Contact MOCS at passport@mocs.nyc.gov for additional information and technical support.

25. Complaints About the Bid Process

The New York City Comptroller is charged with the audit of contracts in New York City. Any vendor who believes that there has been unfairness, favoritism or impropriety in the bid process should inform the Comptroller, Office of Contract Administration, One Centre Street, Room 835, New York, New York; telephone number (212)669-2323.

26. Bid, Performance and Payment Security

(A) Bid Security: Each bid must be accompanied by bid security in an amount and type specified in the PASSPort RFX questionnaire. The bid security shall assure the City of New York of the adherence of the bidder to its proposal, the execution of the Contract, and the furnishing of Performance and Payment Bonds by the bidder, if required in the PASSPort RFX. Bid security shall be returned to the bidder as follows:

- (1) Within ten (10) days after the bid opening, the Comptroller will be notified to return the deposits of all but the three (3) lowest bidders. Within five (5) days after the award, the Comptroller will be notified to return the deposits of the remaining two unsuccessful bidders.
- (2) Within five (5) days after the execution of the Contract and acceptance of the Contractor's bonds, the Comptroller will be notified to return the bid security of the successful bidder or, if performance and payment bonds are not required, only after the sum retained under Article 21 of the Contract equals the amount of the bid security.
- (3) Where all bids are rejected, the Comptroller will be notified to return the deposit of the three (3) lowest bidders at the time of rejection.

(B) Performance and Payment Security: Performance and Payment Security must be provided in an amount and type specified in the PASSPort RFX. The performance and payment security shall be delivered by the contractor prior to or at the time of execution of the Contract. If a contractor fails to deliver the required performance and payment security, its bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive bidder, or the contract may be rebid.

(C) Acceptable Types of Security: Acceptable types of security for bids, performance, and payment shall be limited to the following:

- (1) a one-time bond in a form satisfactory to the City;
- (2) a bank certified check or money order;
- (3) obligations of the City of New York; or
- (4) other financial instruments as determined by the Office of Construction in consultation with the Comptroller.

Whenever the successful bidder deposits obligations of the City of New York as performance and payment security, the Comptroller may sell and use the proceeds thereof for any purpose for which the principal or

surety on such bond would be liable under the terms of the Contract. If the money is deposited with the Comptroller, the successful bidder shall not be entitled to receive interest on such money from the City.

- (D) Form of Bonds: Security provided in the form of bonds must be prepared on the form of bonds authorized by the City of New York. Forms for bid, performance, and payment bonds are included in the Invitation for Bids Documents. Such bonds must have as surety thereunder such surety company or companies as are: (1) approved by the City of New York; (2) authorized to do business in the State of New York, and (3) approved by the Department of the Treasury of the United States. Premiums for any required bonds must be included in the base bid.

The bidder is advised that submission of a bid bond where the surety on such bond fails to meet the criteria set forth herein, shall result in the rejection of the bid as non-responsive.

The Department of the Treasury of the United States advises that information concerning approved surety companies may be obtained as follows: (1) from the Government Printing Office at 215-364-6465; (2) through the Internet at <https://www.fiscal.treasury.gov/surety-bonds/>.

- (E) Power of Attorney: Attorneys in fact who sign bid, performance, or payment bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

27. Failure to Execute Contract

In the event of failure of the successful bidder to execute the Contract and furnish the required security within ten (10) days after notice of the award of the Contract, the deposit of the successful bidder or so much thereof as shall be applicable to the amount of the award made shall be retained by the City, and the successful bidder shall be liable for and hereby agrees to pay on demand the difference between the price bid and the price for which such Contract shall be subsequently awarded, including the cost of any required reletting and less the amount of such deposit. No plea of mistake in such accepted bid shall be available to the bidder for the recovery of the deposit or as a defense to any action based upon such accepted bid. Further, should the bidder's failure to comply with this Section cause any funding agency, body or group (Federal, State, City, Public, Private, etc.) to terminate, cancel or reduce the funding on this project, the bidder in such event shall be liable also to the City for the amount of actual funding withdrawn by such agency on this project, less the amount of the forfeited deposit.

28. Bidder Responsibilities and Qualifications

- (A) Bidders must include with their bids all information necessary for a determination of bidder responsibility, as set forth in the Specifications.
- (B) The Agency may require any bidder or prospective bidder to furnish all books of account, records, vouchers, statements or other information concerning the bidder's financial status for examination as may be required by the Agency to ascertain the bidder's responsibility and capability to perform the Contract. If required, a bidder must also submit a sworn statement setting forth such information as the Agency may require concerning present and proposed plant and equipment, the personnel and qualifications of the bidder's working organizations, prior experience and performance record.
- (C) Oral Examination on Qualifications: In addition thereto, and when directed by the Agency, the bidder, or a responsible officer, agent or employee of the bidder, must submit to an oral examination to be conducted by the Agency in relation to the bidder's proposed tentative plan and schedule of operations, and such other matters as the Agency may deem necessary in order to determine the bidder's ability and responsibility to perform the work in accordance with the Contract. Each person so examined must sign and verify a stenographic transcript of such examination noting thereon such corrections as such person may desire to make.
- (D) If the bidder fails or refuses to supply any of the documents or information set forth in paragraph (B) hereof or fails to comply with any of the requirements thereof, the Agency may reject the bid.

29. Employment Report

In accordance with Executive Order No. 50 (1980) as modified by Executive Order 108 (1986), the filing of a

completed Employment Report (ER) is a requirement of doing business with the City of New York for construction contractors with contracts of \$1,000,000 or more and subcontractors with construction subcontracts of \$750,000 or more. The required forms and information are included in the PASSPort Vendor Profile.

30. Labor Law Requirements

- (A) General: The successful bidder will be required to comply strictly with all Federal, State and local labor laws and regulations.
- (B) New York State Labor Law: This Contract is subject to New York State Labor Law Section 220, which requires that construction workers on the site be paid prevailing wages and supplements. The Contractor is reminded that all wage provisions of this Contract will be enforced strictly and failure to comply will be considered when evaluating performance. Noncompliance may result in the contractor being debarred by the City from future contracts. Complaints filed with the Comptroller may result in decisions which may debar a contractor from bidding contracts with any state governmental entity and other political subdivisions.
- (C) Records: The Contractor is expected to submit accurate payroll reports and other required documents and verify attendance and job classifications being utilized in compliance with the law, Contract provisions and agency procedures.

31. Insurance

- (A) Bidders are advised that the insurance requirements contained herein are regarded as material terms of the Contract. As required by Article 22 of the Contract, the contractor must effect and maintain with companies licensed and authorized to do business in the State of New York, the types of insurance set forth therein, when required by and in the amounts set forth in Schedule A of the General Conditions. Such required insurance must be provided from the date the contractor is ordered to commence work and up to the date of final acceptance of all required work.
- (B) The contractor must, within ten days of receipt of the notice of award, submit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A of the General Conditions, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by Section 57 of the New York State Workers' Compensation Law and Section 220 of the Disability Benefits Law.

32. Lump Sum Contracts

- (A) Comparison of Bids: Bids on Lump Sum Contracts will be compared on the basis of the lump sum price bid, adjusted for alternate prices bid, if any.
- (B) Lump Sum Bids for "General Construction Work" which include excavation shall include all necessary excavation work defined in the Specifications as being included in the lump sum bid. The bidder shall also bid a unit price for the additional cost of excavating material which is defined in the Specifications as excavation for which additional payment will be made. The total estimated additional cost of removing such material will be taken as the quantity set forth in the Engineer's Estimate multiplied by the unit price bid. This total estimated cost of additional excavation shall be added to the lump sum bid for the General Construction Work for the purpose of comparing bids to determine the low bidder.
- (C) Variations from Engineer's Estimate: The Engineer's Estimate of the quantity of excavation for which additional payment will be made is approximate only and is given solely to be used as a uniform basis for the comparison of bids and such estimate is not to be considered as part of this contract. The quantities actually required to complete the contract work may be more or less than the quantities in the Engineer's Estimate and, if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

33. Unit Price Contracts

- (A) Comparison of Bids: Bids on Unit Price Contracts will be compared on the basis of a total estimated price,

arrived at by taking the sum of the estimated quantities of such items, in accordance with the Engineer's Estimate of Quantities set forth in the Bid Schedule, multiplied by the corresponding unit prices, and including any lump sum bids on individual items.

(B) Variations from Engineer's Estimate: Bidders are warned that the Engineer's Estimate of Quantities on the various items of work and materials is approximate only, given solely to be used as a uniform basis for the comparison of bids, and is not be considered part of this contract. The quantities actually required to complete the contract work may be less or more than so estimated, and if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

(C) Overruns: The terms and conditions applicable to overruns of unit price items are set forth in Article 26 of the Contract.

34. Excise Tax

Bidders are referred to the Specifications for information on Federal Excise Tax exemptions.

35. Licenses and Permits

The successful bidder will be required to obtain all necessary licenses and permits necessary to perform the work.

36. Multiple Prime Contractors

If more than one prime contractor will be involved on this project, all contractors are required to examine the Invitation for Bid packages for all other parts of the project.

37. Locally Based Enterprise Requirements (LBE)

This Contract is subject to the requirements of Administrative Code, Section 6-108.1, and the regulations promulgated thereunder. No construction contract will be awarded unless and until these requirements have been complied with in their entirety. The bidder is advised of the provisions set forth below, as well as the provisions with respect to the Locally Based Enterprise Program contained in Article 67 of the Contract. The contractor is advised that:

(A) If any portion of the Contract is subcontracted, not less than ten percent of the total dollar amount of the contract shall be awarded to locally based enterprises ("LBEs"); except, where less than ten percent of the total dollar amount of the Contract is subcontracted, such lesser percentage shall be so awarded.

(B) No contractor shall require performance and payment bonds from LBE subcontractors.

(C) No Contract shall be awarded unless the contractor first identifies in its bid:

(1) the percentage, dollar amount and type of work to be subcontracted; and

(2) the percentage, dollar amount and type of work to be subcontracted to LBEs.

(D) Within ten calendar days after notification of low bid, the apparent low bidder shall submit an "LBE Participation Schedule" to the contracting agency. If such schedule does not identify sufficient LBE subcontractors to meet the requirements of Administrative Code Section 6-108.1, the apparent low bidder shall submit documentation of its good faith efforts to meet such requirements.

(1) The "LBE Participation Schedule" shall include:

(a) the name and address of each LBE that will be given a subcontract,

(b) the percentage, dollar amount and type of work to be subcontracted to the LBE, and

(c) the dates when the LBE subcontract work will commence and end.

(2) The following documents shall be attached to the "LBE Participation Schedule":

(a) verification letters from each subcontractor listed in the "LBE Participation Schedule" stating that the LBE will enter into a formal agreement for work,

- (b) certification documents of any proposed LBE subcontractor which is not on the LBE certified list, and
 - (c) copies of the certification letter of any proposed subcontractor which is an LBE.
- (3) Documentation of good faith efforts to achieve the required LBE percentage shall include as appropriate but not limited to the following:
- (a) attendance at prebid meetings, when scheduled by the agency, to advise bidders of contract requirements;
 - (b) advertisement where appropriate in general circulation media, trade association publications and small business media of the specific subcontracts that would be at least equal to the percentage goal for LBE utilization specified by the contractor;
 - (c) written notification to association of small, minority and women contractors soliciting specific subcontractors;
 - (d) written notification by certified mail to LBE firms that their interest in the contract is solicited for specific work items and their estimated values;
 - (e) demonstration of efforts made to select portions of the work for performance by LBE firms in order to increase the likelihood of achieving the stated goal;
 - (f) documented efforts to negotiate with LBE firms for specific subcontracts, including at a minimum:
 - (i) The names, address and telephone numbers of LBE firms that are contacted;
 - (ii) A description of the information provided to LBE firms regarding the plans and specifications for portions of the work to be performed;
 - (iii) Documentation showing that no reasonable price can be obtained from LBE firms;
 - (iv) A statement of why agreements with LBE firms were not reached;
 - (g) a statement of the reason for rejecting any LBE firm which the contractor deemed to be unqualified; and
 - (h) documentation of efforts made to assist the LBE firms contacted that needed assistance in obtaining required insurance.
- (E) Unless otherwise waived by the Commissioner with the approval of the Office of Economic and Financial Opportunity, failure of a proposed contractor to provide the information required by paragraphs (C) and (D) above may render the bid non-responsive and the Contract may not be awarded to the bidder. If the contractor states that it will subcontract a specific portion of the work, but can demonstrate despite good faith efforts it cannot achieve its required LBE percentage for subcontracted work until after award of Contract, the Contract may be awarded, subject to a letter of compliance from the contractor stating that it will comply with Administrative Code Section 6-108.1 and subject to approval by the Commissioner. If the contractor has not met its required LBE percentage prior to award, the contractor shall demonstrate that a good faith effort has been made subsequent to award to obtain LBEs on each subcontract until it meets the required percentage.
- (F) When a bidder indicates prior to award that no work will be subcontracted, no work may be subcontracted without the prior written approval of the Commissioner, which shall be granted only if the contractor in good faith seeks LBE subcontractors at least six weeks prior to the start of work.
- (G) The contractor may not substitute or change any LBE which was identified prior to award of the contract without the written permission of the Commissioner. The contractor shall make a written application to the Commissioner for permission to make such substitution or change, explaining why the contractor needs to change its LBE subcontractor and how the contractor will meet its LBE subcontracting requirement. Copies of such application must be served on the originally identified LBE by certified mail return receipt requested,

as well as the proposed substitute LBE. The Commissioner shall determine whether or not to grant the contractor's request for substitution.

38. Bid Submission Requirements

The Bid Submission Requirements are set forth in the PASSPort RFx.

39. Comptroller's Certificate

This Contract shall not be binding or of any force unless it is registered by the Comptroller in accordance with Section 328 of the City Charter and the Procurement Policy Board Rules. This Contract shall continue in force only after annual appropriation of funds by the City of New York and certification as hereinabove set forth.

40. Procurement Policy Board Rules

This Invitation For Bids is subject to the Rules of the Procurement Policy Board of the City of New York. In the event of a conflict between said Rules and a provision of this Invitation For Bids, the Rules shall take precedence.

41. DDC Safety Requirements

The DDC Safety Requirements apply to the work to be performed pursuant to the Contract. The DDC Safety Requirements are set forth on the following pages.

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CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
SAFETY REQUIREMENTS FOR CONSTRUCTION
CONTRACTS

January 2020

THE DDC SAFETY REQUIREMENTS FOR CONSTRUCTION CONTRACTS INCLUDE THE FOLLOWING SECTIONS:

- I. POLICY ON SITE SAFETY**
- II. PURPOSE**
- III. DEFINITIONS**
- IV. RESPONSIBILITIES**
- V. SAFETY QUESTIONNAIRE**
- VI. SITE SAFETY PLAN**
- VII. KICK-OFF/PRE-CONSTRUCTION MEETINGS AND SAFETY REVIEW**
- VIII. EVALUATION DURING WORK IN PROGRESS**
- IX. SAFETY PERFORMANCE EVALUATION**

I. POLICY ON SITE SAFETY

The City of New York Department of Design and Construction (DDC) is committed to a policy of injury and illness prevention and risk management for construction work that will ensure the safety and health of the workers engaged in the projects and the protection of the general public. Therefore, it is DDC's policy that work carried out by Contractors on DDC contracts must, at a minimum, comply with the most current versions of all applicable federal, state and city laws, rules, and regulations, including without limitation:

- ❑ Code of Federal Regulations, Title 29, Part 1926 (29 CFR 1926) and applicable Sub-parts of Part 1910 – U.S. Occupational Safety and Health Administration (OSHA);
- ❑ Federal Highway Administration – Manual on Uniform Traffic Control Devices (MUTCD);
- ❑ New York Codes, Rules and Regulations (NYCRR), Title 12, Part 23 – Protection in Construction, Demolition and Excavation Operations;
- ❑ New York Codes, Rules and Regulations (NYCRR), Title 16, Part 753 – Protection of Underground Facilities;
- ❑ New York City Administrative Code, Title 28 – New York City Construction Codes;
- ❑ Rules of the City of New York, Title 15, Chapter 13 – Rules Pertaining To the Prevention of the Emission of Dust from Construction Related Activities;
- ❑ Rules of the City of New York, Title 15, Chapter 28 – Citywide Construction Noise Mitigation;
- ❑ Rules of the City of New York, Title 34 Chapter 2 – NYCDOT Highway Rules.

The Contractor will be required to comply with all new and/or revised federal, state and city laws, rules, and regulations, issued during the course of the project, at the expense of the Contractor without any additional costs to the DDC.

II. PURPOSE

The purpose of this policy is to ensure that Contractors perform their work and supervise their employees in accordance with all applicable federal, state and city rules and regulations. Further, Contractors will be expected to minimize or eliminate jobsite and public hazards, through a planning, inspection, auditing and corrective action process. The goal is to control risks so that injuries, illnesses, and accidents to contractors' employees, DDC employees and the general public, as well as damage to city-owned and private property, are reduced to the lowest level feasible.

III. DEFINITIONS

Agency Chief Contracting Officer (ACCO): The ACCO will mean the person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the City Chief Procurement Officer (CCPO).

Competent Person: As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees or the general public, and who has authorization to take prompt corrective measures to eliminate them. This individual will have completed, at a minimum an authorized 30-hour OSHA Construction Safety Course. The Contractor may be required to provide more than one competent person due to construction operations and based on the number of active work sites.

Construction Safety Auditor: A representative of the Office of Construction Safety who provides inspection and assessment services to enhance health and safety on all DDC construction projects. The activities of the Construction Safety Auditor include performing site audits, reviewing safety plans, reviewing construction permits, drawings, verifying Contractor's compliance with applicable federal, state and city laws, rules, regulations, and DDC Contract Safety Requirements, etc. and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.

Office of Construction Safety: A unit of DDC Safety and Site Support that assesses contractor’s safety on DDC jobsites and advises responsible parties of needed corrective actions.

Registered Construction Superintendent: For certain projects, as defined in New York City Construction Codes – Title 28, the contractor will provide a Construction Superintendent registered with the NYC Department of Buildings and responsible for all duties as defined in Chapter 33 of Title 1 of the Rules of the City of New York.

Contractor: For purposes of these Safety Requirements, the term “Contractor” will mean any person or entity that enters into a contract for the performance of construction work on a DDC project. The term “Contractor” will include any person or entity which enters into any of the following types of contracts: (1) a prime construction contract for a specific project, (2) a prime construction contract using the Job Order Contracting System (“JOCS Contract”), and (3) a subcontract with a CM/Builder (“First Tier Subcontract”).

Daily Safety Job Briefing: Daily jobsite safety briefings, given to all jobsite personnel at project site by the Contractor before work begins and/or if hazards or potential hazards are discovered while working, with the purpose of discussing the scheduled activities for the day, the hazards related to these activities, activity specific safety procedures, and Job Hazard Analysis associated with the scheduled construction work. Daily jobsite briefings will be documented, available at the jobsite, and will include at a minimum, topics, name and signature of the person conducting the briefing session, names and signatures of attendants, name of the designated competent person, contactor’s name, DDC Project ID, date, time, and location.

Director – Office of Construction Safety: Responsible for the operations of the Office of Construction Safety and the DDC Site Safety management programs.

Job Hazard Analysis (JHA): A process of identifying the major job tasks and any potential site-specific hazards that may be present during construction and establishing the means and methods to eliminate or control those hazards. A JHA will be documented, available at the jobsite and will include at a minimum work tasks, being performed, identified hazards, control methods for the identified hazards, contractor’s name, DDC Project ID, location, date, name and signature of certifying person. A JHA is a living document that will be re-evaluated and revised to address new hazards and tasks that may develop and will be present at the worksite and produced upon request.

Qualified Person: As defined by OSHA, an individual who, by possession of a recognized degree, certificate, license, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve problems relating to the subject matter, the work, or the project. Qualified Persons are required under regulation to address issues pertaining, but without limit, to fall protection, scaffold design, maintenance and protection of traffic, and excavation protective system, among others.

Project Site: Those areas indicated in the Contract Documents where the Work is to be performed.

Project Safety Representative: The designated Project Safety Representative will have at a minimum an OSHA 30-hour Construction Safety Course and other safety training applicable to Contractor’s/subcontractor’s project work. This individual will be responsible to oversee safety performance of the required construction work, conduct documented daily safety inspections, and implement corrective actions to maintain a safe work site. The Project Safety Representative must have sufficient experience and skills necessary to thoroughly understand the health and safety hazards and controls and must have authority to undertake corrective actions. A dedicated full-time Project Safety Representative may be required on large projects and projects deemed by DDC to be particularly high risk. DDC reserves the right to request a dedicated full-time Project Safety Representative for any reason at any time during the course of the project at the expense of the Contractor without any additional costs to the DDC. The full-time Project Safety Representative will be present at the site during all work activities.

Resident Engineer (“RE”): Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. The RE may be a consultant retained by DDC, including a Construction Management (CM) or Resident Engineer Inspection (REI) firm. If DDC has retained a CM, REI or other consultant firm to perform management and oversight for the Project (e.g., CM-Builder, CM-Design-Builder, Project Manager, Program Manager), that CM, REI or other consultant is the Resident Engineer for purposes of these Safety Requirements.

Safety Questionnaire: Used by DDC to evaluate Contractor’s current and past safety performance. It is required to be completed by all Contractors initially when submitting bids for Construction work, or when being pre-qualified and updated annually or as requested by the DDC.

Site Safety Manager: For certain projects, as defined in New York City Construction Codes – Title 28, the Contractor will provide a Site Safety Manager with a Site Safety Manager License issued by the New York City Department of Building.

Site Safety Plan: A site-specific safety plan developed by the Contractor for a DDC project. The Site Safety Plan will identify the project work scope, identify hazards associated with the project work and include project specific safety procedures and training appropriate and necessary to complete the work. The Site Safety Plan will be submitted within 30 days from the Award Date or as otherwise directed and is subject to review and acceptance by the Office of Construction Safety prior to the commencement of work at the site.

Unsafe or Unhealthy Condition: A condition that could be potentially hazardous to the health and safety of personnel or the public, and/or damaging to equipment, machinery, property, or the environment.

Weekly Safety Meetings: Weekly jobsite safety meetings, given to all jobsite personnel by Contractor, with the purpose of discussing general safety topics and job specific requirements encountered at the DDC work site. Weekly safety meetings will be documented and will include at a minimum, topics, name and signature of the person conducting the meeting, names and signatures of attendees, contractor’s name, DDC Project ID, date, and location.

Work: The construction required by the Contractor’s Contract Documents whether completed or partially completed, performed by the Contractor/ subcontractors. Work refers to the furnishing of labor, furnishing and incorporating materials and equipment into the construction and providing any service required by the Contract Documents to fulfill the Contractor’s obligation to complete the Project. For the purposes of these Safety Requirements, the term “Work” includes all Utility Interference work (commonly referred to as “Section U”, “EP-7”, and “Joint Bid” work) performed in association with this Contract.

IV. RESPONSIBILITIES

All persons who manage, perform, and provide support for construction projects will conduct operations in compliance with the requirements identified in this Policy and all applicable governing regulatory agency requirements and guidelines pertaining to safety in construction.

A. Resident Engineer

1. Review and facilitate Contractor(s) Site Safety Plan submittals to DDC for acceptability.
2. Notify the Office of Construction Safety of the commencement of construction work.
3. Develop and implement a training verification process to ensure that all CM/REI, consultant, Contractor, and subcontractor employees are properly trained. Maintain all applicable initial and refresher training records and assures documentation availability on site.
4. Maintain documentation of and attend weekly safety meetings and daily safety job briefings.
5. Assure that Contractor(s) JHA’s are current to reflect the work tasks being performed, hazards, and control methods to mitigate the identified hazards. Verify that all employees at the job site are trained on the JHAs and maintain supporting documentation on site.
6. Assure adequate planning for all critical construction activities (crane operation, excavation, confined space entry, etc.) including coordination between Contractor(s) /DDC/ other Agencies as required.
7. Maintain custody of all construction related permits, plans, approvals, drawings, etc., related to the project and assure their availability on site.
8. Recognize, minimize, or eliminate jobsite and public hazards, through required planning, inspection, verification, and corrective action process.
9. Monitor the conditions at the site for conformance with the Contractor’s Site Safety Plan, DDC policies, permits, and all applicable regulations and documentation that pertain to construction safety.
10. Notify the Contractor and DDC immediately upon determination of any condition or activity existing which is not in compliance with the Contractor’s Site Safety Plan, applicable federal, state or local codes or any

condition that presents a potential risk of injury to the public or workers or possible damage to property. Direct the Contractor to provide such labor, materials, equipment, and supervision to remedy such conditions.

11. Notify the Office of Construction Safety and the ACCO's Insurance and Risk Management Unit of project-related accidents, incidents, and near misses as per DDC's Construction Safety Emergency and Accident Notification and Response Procedure within two (2) hours.
12. In case of an accident, incident, or near miss, RE is responsible to protect the integrity of the accident site including but not limited to: the safeguarding of all evidence, documentation of all personnel on site at the time of the accident, gather facts related to all accidents, incidents, or near miss, and prepare required DDC Construction Accident Report as per DDC's Construction Safety Emergency and Accident Notification and Response Procedure. Maintain all records pertaining to accidents, incidents, and near miss and have them available upon request.
13. Notify the Office of Construction Safety within two (2) hours of the start of an inspection by any outside/regulatory agency personnel, including NYS, OSHA, NYC DOB or any other City/State/Federal oversight entity and forward a copy of the inspection report within one business day of its receipt.
14. Escort and assist Construction Safety Auditors during all field and record audits.
15. Report any emergency conditions to the Office of Construction Safety immediately.

Note: In addition to the responsibilities listed above, if the Resident Engineer is a CM/REI or other non-City party hired by the City to manage the Project, the Resident Engineer is also required to do the following:

16. Provide personnel who are certified and or trained appropriately for the requirements of the project.
17. Perform an investigation for any project-related accidents, incidents, and near misses. Within 24-hours of the time of the accident, incident, or near miss, the CM/REI will submit an investigation report to the Office of Construction Safety. Such report will include proposed remedial measures and implementation of corrective actions to prevent recurrence.

DDC reserves the right to request that the CM/REI replace any CM/REI personnel for any reason at any time during the project.

B. Construction Contractors

Note: For CM-Build and CM-Design-Build Projects, the CM will meet all requirements listed in this section, as well as the Resident Engineer section above.

1. Submit a completed Safety Questionnaire and other safety performance related documentation with its bid or as part of a pre-qualification package.
2. Submit a Site Safety Plan within 30 days from the Award Date or as otherwise directed. The Site Safety Plan is subject to review and acceptance by the Office of Construction Safety prior to the commencement of work at the site. The Site Safety Plan will be revised and updated as necessary during the course of the project. If requested by the Office of Construction Safety, the Site Safety Plan must be developed and submitted for approval using a web-based system, the Site Safety Plan Application (SSP App).
3. Designate and identify a Project Safety Representative in the Site Safety Plan. The Contractor will immediately notify the Office of Construction Safety, in a form and manner acceptable to the Office of Construction Safety, of any permanent change to the designated Project Safety Representative. In the event the primary designated Project Safety Representative is temporary unable to perform his or her duties, an alternate Project Safety Representative will be provided. Resumes, outlining the qualification and experience for the Project Safety Representative (s) will be included in the Site Safety Plan and available upon request. DDC reserves the right to request the Contractor to replace a Project Safety Representative for any reason at any time during the course of the project.
4. Designate and identify a Competent Person(s) in the Site Safety Plan. Contractor/subcontractor may be required to provide more than one competent person due to construction operations and based on a number of work tasks/areas. DDC reserves the right to request the Contractor to replace a Competent Person or provide additional Competent Person(s) for any reason at any time during the course of the project. The Competent Person will be present at the site during all work activities.
5. For certain projects, as defined in New York City Construction Codes – Title 28, designate and identify the Licensed Site Safety Manager or Registered Construction Superintendent. Resumes, outlining the qualification and experience for the Licensed Site Safety Manager or Registered Construction Superintendent will be included in the Site Safety Plan and available upon request. The Contractor will immediately notify the Office

of Construction Safety, in a form and manner acceptable to the Office of Construction Safety, of any permanent change to the designated Site Safety Manager and/or Construction Superintendent. In the event the primary designated Site Safety Manager or Construction Superintendent is temporarily unable to perform his or her duties, an alternate Licensed Site Safety Manager and/or Registered Construction Superintendent will be provided. The Office of Construction Safety must be informed of such change. DDC reserves the right to request the Contractor to replace Site Safety Manager or Construction Superintendent for any reason at any time during the course of the project.

6. Develop a written Job Hazard Analysis (JHA) that identifies safety hazards and control methods for project specific work tasks. A preliminary JHA will be included in the Site Safety Plan submitted by the Contractor. A JHA is a living document that will be re-evaluated and revised to address new hazards and tasks that may develop during the course of the project and will be present at the worksite and produced upon request.
7. Develop project specific safety procedures to protect employees, general public, and property during all construction activities for the duration of the project.
8. Ensure that all employees are aware of the hazards associated with the project through documented formal and informal training and/or other communications. Conduct and document new employee and site-specific safety orientation for all Contractor and subcontractor personnel to review the hazards associated with the project as identified in the Site Safety Plan and the specific safety procedures and controls that will be used to protect workers, the general public and property. The Project Safety Representative will conduct this training prior to mobilization and if necessary during the course of the project. Documentation will be provided to the RE.
9. Prior to performing any work on DDC projects all Contractor's and subcontractor's employees will, at a minimum, have successfully completed, within the previous five calendar years, an OSHA 10-hour construction safety course.
All training records (OSHA 10-hour, flagger, scaffold, fall protection, confined space, etc.) will be provided to the RE prior to mobilization, included in the Site Safety Plan, kept current during the course of the project, and available for review.
10. Conduct and document weekly safety meetings and daily job briefing sessions for the duration of the project. Attendance at weekly safety meetings and daily job briefing sessions is mandatory. A written record of weekly safety meetings will be available upon request and job briefing sessions will be available at the worksite.
11. As part of the Site Safety Plan, prepare site specific procedures, such as maintenance and protection of traffic plan, steel erection plan, confined space program, fall protection plan, demolition plan, site specific emergency evacuation plan, etc. (if not otherwise provided in the contract documents) and comply with all of its provisions.
12. Have immediately available for review at the project site where actual construction activities are being performed all applicable documentation, including but not limited to: JHAs for work tasks being performed, all required training records, MPT plan (where applicable), Noise and Dust Mitigation Plans, excavation protective system drawings (where applicable), Emergency Evacuation plan, fall protection program (where applicable), confined space program (where applicable), all required permits, daily job briefing records, all required documentation for crane operation (where applicable), daily inspection checklist, scaffold and sidewalk drawings (when applicable), safety data sheets for chemicals in use.
13. Comply with all federal, state and local safety and health rules, laws, and regulations.
14. Comply with all provisions of the Site Safety Plan.
15. Provide, replace, and adequately maintain at or around the project site, suitable and sufficient signage, lights, barricades and enclosures (fences, sidewalk sheds, netting, bracing, etc.). The project specific MPT plan will be developed, implemented, and reviewed during the course of the project.
16. The Project Safety Representative will conduct daily safety inspections, document the inspection results, implement corrective actions for the identified hazards. Maintain the inspection records and have them available upon request.
17. **Report unsafe or unhealthy conditions to the RE as soon as practical, but no more than 24 hours after discovery, and take prompt actions to remove or abate such conditions. Should an imminent dangerous condition be discovered, Contractor will stop all work in the area of danger until corrections are made.**
18. Report all accidents, incidents and near misses involving injuries to workers or the general public, as well as property damage, to the RE within one (1) hour.
19. Following an accident or incident, unless otherwise directed, the Contractor will not remove or alter any equipment, structure, material, or evidence related to the accident or incident. Exception: Immediate emergency procedures taken to secure structures, temporary construction, operations, or equipment that pose a continued imminent danger or facilitate assistance for persons who are trapped or who have sustained bodily injury. Take

additional measures as necessary to secure the accident or incident site and to protect against any further injury or property damage.

20. The Contractor will perform an investigation into the root cause of the accident, incident, or near miss. Within 24 hours of an accident, incident, or near miss, the Contractor will prepare and submit to the RE a written investigation report detailing findings, corrective actions, and hazard mitigation implementation to prevent recurrence.
21. Notify the RE within two (2) hours of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB, or others.
22. Maintain all records pertaining to all required safety compliance documents, accidents and incidents reports. DDC reserves the right to request copy of any records pertaining to the safety of the project and required by DDC and other federal, state, and city agencies, including but not limited to permits, training records, safety inspection records, drawings, equipment records, etc.
23. Cooperate with DDC Office of Construction Safety/ RE and address DDC recommendations on safety, which will in no way relieve the Contractor of its responsibilities for safety on the project. The Contractor has sole responsibility for safety.

V. SAFETY QUESTIONNAIRE

DDC requires that all Contractors provide information regarding their current and past safety performance and programs. This will be accomplished by the use of the DDC Safety Questionnaire. As a part of the bid submittal package, the contractor will submit a completed DDC Safety Questionnaire listing company workers' compensation experience modification rating and OSHA Incident Rates for the three (3) years prior to the date of the bid opening. DDC may request a Contractor to update its Questionnaire at any time or to provide more detailed information. The Contractor will provide the requested information within 15 days.

The following criteria will be used by DDC in reviewing the Contractor's responsibility, which will be based on the information provided on the questionnaire:

- Criteria 1: OSHA Injury and Illness Rates (I&IR) are no greater than the average for the industry (based on the most current Bureau of Labor Statistics data for the Contractors SIC code); and
- Criteria 2: Insurance workers compensation Experience Modification Rate (EMR) equal to or less than 1.0; and
- Criteria 3: Any willful violations issued by OSHA or NYC DOB within the last three (3) years; and
- Criteria 4: A fatality (worker or member of public) and injuries, requiring OSHA notification, experienced on or near Contractor's worksite within the last three (3) years; and
- Criteria 5: Past safety performance on DDC projects (accidents; status of site safety plan submittals; etc.)
- Criteria 6: OSHA violation history for the last three (3) years;
- Criteria 7: Contractor will provide OSHA Injury and Illness Records (currently OSHA 300 and 300A Logs) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Office of Construction Safety may request, through the ACCO, more details concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, accident investigation reports, OSHA records, OSHA and NYC DOB citations, EPA citations and written corrective action plan.

VI. SITE SAFETY PLAN

Within thirty (30) days from the Award Date or as otherwise directed, the Contractor will submit the Site Safety Plan. The Site Safety Plan will identify project work scope, safety hazards associated with the project tasks, and include specific safety procedures and training appropriate and necessary to complete the work. The Site Safety Plan is subject to review and acceptance by the Office of Construction Safety prior to the commencement of work at the site. Due to the project work scope and project duration, the Office of Construction Safety may grant a conditional acceptance for a Site Safety Plan without all sections being complete. In a case of a "Conditional Acceptance" of a Site Safety Plan,

the Contractor will provide the remaining sections previously incomplete and/or not submitted for review and acceptance by the Office of Construction Safety prior to the commencement of the construction activities. The Office of Construction Safety reserves the right to withdraw the initial “Conditional Acceptance” if the Contractor fails to provide the remaining sections of a Site Safety Plan. Failure by the Contractor to submit an acceptable Site Safety Plan will be grounds for default.

Site Safety Plan requirements: The Site Safety Plan will be a written document and will apply to all project specific Contractor and subcontractor operations, and will have at a minimum, the following elements with each described in a separate section (It may be necessary to modify the basic format for certain unique or high-risk projects, such as tunnels or high-rise construction). All Site Safety Plan sections will be numbered in the order listed below. For sections, which are not applicable for the type of the work being performed by the Contractor on DDC project, the Contractor will in writing indicate “Not applicable based on the project work scope.” The Site Safety Plan will include Contractor’s name, DDC project ID, project location (s), and development and revision dates. The Site Safety Plan will include the sections, attachments, and appendixes provided in the Site Safety Plan. All pages of the Site Safety Plan will be numbered. If requested by the Office of Construction Safety, the Site Safety Plan must be developed and submitted for approval using a web-based system, the Site Safety Plan Application (SSP App).

1. Project Work Scope – Detailed information regarding work tasks that will be performed by Contractor and subcontractors under the project.
2. Responsibility and Organization – Contractor’s organization chart with responsible personnel for the project, including titles, names, contact information, roles, and responsibilities. All Contractor’s personnel required by the DDC Safety Requirements will be identified.
3. Safety Training and Education – OSHA 10 Hours training, requirements for daily safety briefings and weekly safety meetings, any work task specific training, responsible staff for implementation of training program for the project.
4. Job Hazard Analysis (JHA) – Project specific Job Hazard Analysis including work tasks, identified hazards, hazard control methods (administrative, engineering, PPE) to protect workers, property and general public, Contractor’s name, project id, location, name and signature of a certifying person, hazard assessment date.
5. Protection of Public – Project specific procedures covering safety of the general public during all project construction activities.
6. Hazard Corrective Actions - Procedures for hazard identification, including responsible person(s), frequency of safety inspections, implementation of corrective actions, safety inspection checklist.
7. Accident/Exposure Investigation – Project specific procedures for accident/incident/near miss investigation and implementation of corrective actions. Accident/incident/near miss notification procedure of DDC project staff (timer frame and responsible personnel).
8. Recording and Reporting Injuries – Procedures to meet 29 CFR 1904 requirements.
9. First Aid and Medical Attention – Responsible staff, location and inspection of First Aid kit, directions to local hospitals; emergency telephone numbers.
10. Project Specific Fire Protection and Prevention Program – Project specific procedures, including responsible staff, fire alarm system/methods, hot work procedures, etc.
11. Housekeeping Procedure.
12. Project Specific Illumination Procedure.
13. Project Specific Sanitation Procedure.
14. Personal Protective Equipment (PPE), including Respiratory Protection Program and Hearing Conservation Program, if required.
15. Hazard Communication Program – Contractor’s Hazard Communication Program, responsible staff; training; SDS records, project specific list of chemicals; location of the program and SDS records.
16. Means of Egress – Information regarding free and unobstructed egress from all parts of the building or structure; exit marking; maintenance of means of egress, etc.
17. Employee Emergency Action Plan – Project specific: responsible staff, emergency alarm system/devices, evacuation procedure, procedure to account for employees after evacuation, etc.
18. Evacuation Plan – Project specific evacuation plan (drawing/scheme) with exists and evacuation routes.
19. Ionizing/Nonionizing Radiation – Competent person, license and qualification requirements, type of radiation, employee’s exposure and protection, safety procedures, etc.

20. Material Handling, Storage, Use and Disposal – Project specific information regarding material storage, disposal, and handling: procedures, plan/drawings, etc.
21. Signs, Signals, and Barricades – Use of danger/warning signs, safety instruction signs, sidewalk closure and pedestrian fencing and barricades (if not included in the MPT plan), etc.
22. Tools – Hand and Power – Safety procedures for the type of tools to be used.
23. Scaffold – Project specific scaffold types, procedures, training requirements, scaffold drawings, designed, sealed, and signed by NYS Licensed Professional Engineer, or as otherwise directed; competent person, criteria for project specific scaffold, falling object protection, procedures for aerial lifts/scissor lifts.
24. Welding and Cutting – Project specific procedure for welding and cutting, including all necessary safety requirements such as fire prevention, personal protective equipment, hot work permits (if not covered by Contractor’s Fire Prevention and Protection program, FDNY certificate requirements).
25. Electrical Safety – Project specific procedures, including lock out-tag out.
26. Fall Protection – Project specific information regarding selected fall protection systems, fall protection plan, responsible staff.
27. Cranes, Derrick, Hoists, Elevators, Conveyors – project specific equipment information including type, rated load capacity, manufacture specification requirements, competent person, exposure to falling load, inspection, recordkeeping, clearance requirements, communication procedure, ground lines, permits.
28. Excavation Safety – Competent person; excavation procedures; project specific protective system, including drawings, designed, sealed, and signed by NYS Licensed Professional Engineer, or as otherwise directed.
29. Protection of Underground Facilities and Utilities Procedure, including responsible staff and responsibilities.
30. Concrete and Masonry Construction Procedures
31. Maintenance and Protection of Traffic Plan – Project specific MPT plan, designed, sealed, and signed by NYS Licensed Professional Engineer, or as otherwise directed; flagmen training, public safety, etc.
32. Steel Erection – Site specific erection plan, requirements for applicable written notifications, competent person, fall protection plan, training requirements, etc.
33. Demolition – Engineering survey, including written evidence, disconnection of all effected utilities, identification of all hazardous chemicals, materials, gases, etc., floor openings, chutes, inspection and maintenance of all stairs/passageways, removal of materials/debris/structural elements, lock out/tag out, competent person.
34. Blasting and the Use of Explosives – Project specific safety procedures, warning signs, training/qualification, transportation, storage and use of explosives, inspection.
35. Stairways and Ladders – Types of stairs and ladders, safety procedures, training requirements.
36. Alcohol and Drug Abuse Policy
37. Rodents and Vermin Controls
38. Toxic and Hazardous Substances – Safety procedures for substances that Contractor’s and subcontractor’s employees can be exposed on project.
39. Noise Mitigation Plan – Completed project specific Noise Mitigation Plan, and noise mitigation procedures.
40. Confined Space Program – Project specific Confined Space Program, responsible staff, training records, equipment information, rescue procedure, list of project specific confined spaces, forms.
41. Construction Vehicles/Heavy Equipment – Type of construction vehicles/heavy equipment to be used on site, procedures
42. Dust Mitigation Plan – Completed project specific Dust Mitigation Plan, and dust mitigation procedures.
43. Working Over and Near Water. Diving Operations – safety procedures including personal protective equipment, fall protection, rescue services, etc.

The most critical component of the Site Safety Plan is the Job Hazard Analysis (JHA) section. The JHA form is a written document prepared by the Contractor. The Contractor will conduct a site and task assessment to identify the tasks and any potential safety or environmental hazards related to performance of the work, eliminate or implement controls for the potential hazards, and identify proper personal protective equipment for the task. The JHA will be communicated to all Contractor/subcontractor personnel on site. The JHA will include safety hazard identification and controls to protect employees, general public, and property.

The initial JHA will be included in the Contractor’s Site Safety Plan and the current JHA form will be available at the construction site for reference. A JHA is a living document that will be re-evaluated and revised to address new hazards and tasks that may develop and will be present at the worksite and produced upon request.

VII. KICK-OFF MEETINGS/PRE-CONSTRUCTION AND SAFETY REVIEW

Prior to the start of construction activities on all DDC projects, RE will invite the Office of Construction Safety to the construction kick-off meeting. The Office of Construction Safety representative(s) will participate in this meeting with the Contractor and RE for the purpose of:

- A. Reviewing DDC Contract Safety Requirements
- B. Reviewing site-specific safety issues based on a project work scope, location, and any other factors which may impact safety of workers and general public.
- C. Reviewing the Site Safety Plan and JHA requirements.
- D. Reviewing Accident/Incident reporting and investigation procedures.
- E. Reviewing designated safety contacts, roles, and responsibilities.
- F. Discussing planned inspections and audits of the site by the Office of Construction Safety personnel.

VIII. EVALUATION DURING WORK IN PROGRESS

The Contractor's adherence to these Safety Requirements will be monitored throughout the project. This will be accomplished by the following:

- A. Use of a safety checklist by a representative of the Office of Construction Safety (or other designated DDC representative) and the RE during regular inspections and comprehensive audits of the job site. Field Exit Conferences will be held with the RE and Contractor Project Safety Representatives.
- B. The RE will continually monitor the safety and environmental performance of the Contractor's employees and work methods. Deficiencies will be brought to the attention of the Contractor's Project Safety Representative on site for immediate correction. The RE will maintain a written record of these deficiencies and have these records available upon request. Any critical deficiencies will be immediately reported to the Office of Construction Safety via telephone (718)391-1911.
- C. If the Contractor's safety performance during the project is not up to DDC standards (safety performance measure, accident/incident rate, etc.) the Director – Office of Construction Safety, or his/her designee will meet with the Contractor's Project Safety Representative and other representatives, the RE, and the DDC Environmental Specialist (if environmental issues are involved). The purpose of this meeting is to 1) determine the level of non-compliance; 2) explain and clarify the safety/environmental provisions; 3) agree on a future course of action to correct the deficiencies.
- D. If the deficiencies continue, the Commissioner may, without limitation, declare the Contractor in default.
- E. The Contractor will within 1 hour inform the RE of all accidents/incidents/near misses including all fatalities, any injuries to employees or members of the general public, and property damage (e.g., structural damage, equipment rollovers, utility damage, loads dropped from crane). The RE will notify the Office of Construction Safety as per DDC's Construction Safety Emergency and Accident Notification and Response Procedure and will maintain a record of all Contractor accidents/incidents for the project.
- F. The Contractor and the RE will notify the Office of Construction Safety within two (2) hours of the start of any NYS-DOL/ NYC-COSH/ OSHA/ EPA inspections.

IX. SAFETY PERFORMANCE EVALUATION

The Contractor's safety record, including accident/incident history and DDC safety inspection results, will be considered as part of the Contractor's performance evaluation at the conclusion of the project. Poor safety performance during the course of the project will be a reason to rate a Contractor unsatisfactory which may be reflected in the City's PASSPort system and will be considered for future procurement actions as set forth in the City's Procurement Policy Board Rules.

NOTICE TO BIDDERS

Please be advised that the following Riders to the March 2017 New York City Standard Construction Contract have been attached and incorporated in this Invitation for Bid:

- Rider regarding Non-Compensable Delays and Grounds for Extension;
- Rider regarding NYC Earned Safe and Sick Time Act.

Other than provisions specifically delineated in the Riders, all other terms of the March 2017 New York City Standard Construction Contract continue to apply in full force and effect.

**RIDER TO NEW YORK CITY STANDARD CONSTRUCTION CONTRACT (MARCH
2017) REGARDING NON-COMPENSABLE DELAYS AND GROUNDS FOR
EXTENSION**

The following provisions supersede the corresponding provisions in the March 2017 version of the New York City Standard Construction Contract:

1. Section **11.5.1** provides as follows:

11.5.1 The acts or omissions of public or government bodies (other than **City** agencies) or of any third parties who are disclosed in the **Contract Documents**, or those third parties who are ordinarily encountered or who are generally recognized as related to the **Work**, including but not limited to, **Other Contractors**, utilities or private enterprises;

2. Section **11.5.6** provides as follows:

11.5.6 Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides or other catastrophes or acts of God; acts of war or of the public enemy or terrorist acts; disruption, outage or power failure caused by a utility's inability or failure to provide service, pandemics, epidemics, outbreaks of infectious disease or any other public health emergency; other states of emergency declared by the City, State or Federal government, quarantine restrictions, and freight embargoes; including the **City's** reasonable responses to any of the above; and

3. Section **13.3** provides as follows:

13.3 Grounds for Extension: If such application is made, the **Contractor** shall be entitled to an extension of time for delay in completion of the **Work** caused solely:

13.3.1 By any of the acts or omissions of the **City**, its officials, agents or employees set forth in Articles **11.4.1.1** through **11.4.1.9**; or

13.3.2 By or attributable to any of the items set forth in Articles **11.5.1** through **11.5.7**.

13.3.3 The **Contractor** shall, however, be entitled to an extension of time for such causes only for the number of **Days** of delay which the **ACCO** or the Board may determine to be due solely to such causes, and then only if the **Contractor** shall have strictly complied with all of the requirements of Articles 9 and 10.

NYC EARNED SAFE AND SICK TIME ACT CONTRACT RIDER

(To supersede Section 4.06 of the January 2018 Appendix A and Section 35.5 of the March 2017 Standard Construction Contract and to be attached to other City contracts and solicitations)

A. Introduction and General Provisions.

1. The Earned Safe and Sick Time Act (“ESSTA”), codified at Title 20, Chapter 8 of the New York City Administrative Code, also known as the “Paid Safe and Sick Leave Law,” requires covered employees (as defined in Admin. Code § 20-912) in New York City (“City”) to be provided with paid safe and sick time. Contractors of the City or of other governmental entities may be required to provide safe and sick time pursuant to the ESSTA. The ESSTA is enforced by the City’s Department of Consumer and Worker Protection (“DCWP”), which has promulgated 6 RCNY §§ 7-101 and 201 *et seq.* (“DCWP Rules”).

2. The Contractor agrees to comply in all respects with the ESSTA and the DCWP Rules, and as amended, if applicable, in the performance of this agreement. The Contractor further acknowledges that such compliance is a material term of this agreement and that failure to comply with the ESSTA in performance of this agreement may result in its termination.

3. The Contractor must notify (with a copy to DCWP at ComplianceMonitoring@dcwp.nyc.gov) the Agency Chief Contracting Officer of the City Agency or other entity with whom it is contracting in writing within 10 days of receipt of a complaint (whether oral or written) or notice of investigation regarding the ESSTA involving the performance of this agreement. Additionally, the Contractor must cooperate with DCWP’s guidance and must comply with DCWP’s subpoenas, requests for information, and other document demands as set forth in the ESSTA and the DCWP Rules. More information is available at <https://www1.nyc.gov/site/dca/about/paid-sick-leave-what-employers-need-to-know.page>.

4. Upon conclusion of a DCWP investigation, Contractor will receive a findings letter detailing any employee relief and civil penalties owed. Pursuant to the findings, Contractor will have the opportunity to settle any violations and cure the breach of this agreement caused by failure to comply with the ESSTA either i) without a trial by entering into a consent order or ii) appearing before an impartial judge at the City’s administrative tribunal. In addition to and notwithstanding any other rights and remedies available to the City, non-payment of relief and penalties owed pursuant to a consent order or final adjudication within 30 days of such consent order or final adjudication may result in the termination of this agreement without further opportunity to settle or cure the violations.

5. The ESSTA is briefly summarized below for the convenience of the Contractor. The Contractor is advised to review the ESSTA and the DCWP Rules in their entirety. The Contractor may go to www.nyc.gov/PaidSickLeave for resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the Contractor can get more information about how to comply with the ESSTA and the DCWP Rules. The Contractor acknowledges that it is responsible for compliance with the ESSTA and the DCWP Rules notwithstanding any inconsistent language contained herein.

B. *Pursuant to the ESSTA and DCWP Rules: Applicability, Accrual, and Use.*

1. An employee who works within the City must be provided paid safe and sick time.¹ Employers with one hundred or more employees are required to provide 56 hours of safe and sick time for an employee each calendar year. Employers with fewer than one hundred employees are required to provide 40 hours of sick leave each calendar year. Employers must provide a minimum of one hour of safe and sick time for every 30 hours worked by an employee and compensation for such safe and sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage at the time the paid safe or sick time is taken. Employers are not discouraged or prohibited from providing more generous safe and sick time policies than what the ESSTA requires.

2. Employees have the right to determine how much safe and sick time they will use, provided that an employer may set a reasonable minimum increment for the use of safe and sick time not to exceed four hours per day. For the use of safe time or sick time beyond the set minimum increment, an employer may set fixed periods of up to thirty minutes beyond the minimum increment. In addition, an employee may carry over up to 40 or 56 hours of unused safe and sick time to the following calendar year, provided that no employer is required to carry over unused paid safe and sick time if the employee is paid for such unused safe and sick time and the employer provides the employee with at least the legally required amount of paid safe and sick time for such employee for the immediately subsequent calendar year on the first day of such calendar year.

3. An employee entitled to safe and sick time pursuant to the ESSTA may use safe and sick time for any of the following:

a. such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;

b. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild, or grandparent, the child or parent of an employee's spouse or domestic partner, any other individual related by blood to the employee, and any other individual whose close association with the employee is the equivalent of a family relationship) who has a mental illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;

¹ Pursuant to the ESSTA, if fewer than five employees work for the same employer, and the employer had a net income of less than one million dollars during the previous tax year, such employer has the option of providing such employees uncompensated safe and sick time.

c. closure of such employee's place of business by order of a public official due to a public health emergency;

d. such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency; or

e. when the employee or a family member has been the victim of a family offense matter, sexual offense, stalking, or human trafficking:

1. to obtain services from a domestic violence shelter, rape crisis center, or other shelter or services program for relief from a family offense matter, sexual offense, stalking, or human trafficking;
2. to participate in safety planning, temporarily or permanently relocate, or take other actions to increase the safety of the employee or employee's family members from future family offense matters, sexual offenses, stalking, or human trafficking;
3. to meet with a civil attorney or other social service provider to obtain information and advice on, and prepare for or participate in any criminal or civil proceeding, including but not limited to, matters related to a family offense matter, sexual offense, stalking, human trafficking, custody, visitation, matrimonial issues, orders of protection, immigration, housing, discrimination in employment, housing or consumer credit;
4. to file a complaint or domestic incident report with law enforcement;
5. to meet with a district attorney's office;
6. to enroll children in a new school; or
7. to take other actions necessary to maintain, improve, or restore the physical, psychological, or economic, health or safety of the employee or the employee's family member or to protect those who associate or work with the employee.

4. An employer must not require an employee, as a condition of taking safe and sick time, to search for a replacement. However, where the employee's need for safe and sick time is foreseeable, an employer may require an employee to provide reasonable notice of the need to use safe and sick time. For an absence of more than three consecutive work days, an employer may require reasonable documentation that the use of safe and sick time was needed for a reason listed in Admin. Code § 20-914; and/or written confirmation that an employee used safe and sick time pursuant to the ESSTA. However, an employer may not require documentation specifying the nature of a medical condition, require disclosure of the details of a medical condition, or require disclosure of the details of a family offense matter, sexual offense, stalking, or human trafficking, as a condition of providing safe and sick time. Health information and information concerning family offenses, sexual offenses, stalking or human trafficking obtained solely due to an

employee's use of safe and sick time pursuant to the ESSTA must be treated by the employer as confidential. An employer must reimburse an employee for all reasonable costs or expenses incurred in obtaining such documentation for the employer.

5. An employer must provide to all employees a written policy explaining its method of calculating sick time, policies regarding the use of safe and sick time (including any permissible discretionary conditions on use), and policies regarding carry-over of unused time at the end of the year, among other topics. It must provide the policy to employees using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny safe and sick time to an employee because of non-compliance with such a policy.

6. An employer must provide a pay statement or other form of written documentation that informs the employee of the amount of safe/sick time accrued and used during the relevant pay period and the total balance of the employee's accrued safe/sick time available for use.

7. Safe and sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the safe and sick time was used.

C. *Exemptions and Exceptions.* Notwithstanding the above, the ESSTA does not apply to any of the following:

1. an independent contractor who does not meet the definition of employee under N.Y. Labor Law § 190(2);

2. an employee covered by a valid collective bargaining agreement, if the provisions of the ESSTA are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the ESSTA for such employee;

3. an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines their own schedule, has the ability to reject or accept any assignment referred to them, and is paid an average hourly wage that is at least four times the federal minimum wage;

4. an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

5. an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or

6. a participant in a Work Experience Program (WEP) under N.Y. Social Services Law § 336-c.

D. *Retaliation Prohibited.* An employer shall not take any adverse action against an employee that penalizes the employee for, or is reasonably likely to deter the employee from or interfere with the employee exercising or attempting in good faith to exercise any right provided by the ESSTA. In addition, an employer shall not interfere with any investigation, proceeding, or hearing pursuant to the ESSTA.

E. *Notice of Rights.*

1. An employer must provide its employees with written notice of their rights pursuant to the ESSTA. Such notice must be in English and the primary language spoken by an employee, provided that DCWP has made available a translation into such language. Downloadable notices are available on DCWP's website at <https://www1.nyc.gov/site/dca/about/Paid-Safe-Sick-Leave-Notice-of-Employee-Rights.page>. The notice must be provided to the employees by a method that reasonably ensures personal receipt by the employee.

2. Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed \$50.00 for each employee who was not given appropriate notice.

F. *Records.* An employer must retain records documenting its compliance with the ESSTA for a period of at least three years, and must allow DCWP to access such records in furtherance of an investigation related to an alleged violation of the ESSTA.

G. *Enforcement and Penalties.*

1. Upon receiving a complaint alleging a violation of the ESSTA, DCWP must investigate such complaint. DCWP may also open an investigation to determine compliance with the ESSTA on its own initiative. Upon notification of a complaint or an investigation by DCWP, the employer must provide DCWP with a written response and any such other information as DCWP may request. If DCWP believes that a violation of the ESSTA has occurred, it has the right to issue a notice of violation to the employer.

2. DCWP has the power to grant an employee or former employee all appropriate relief as set forth in Admin. Code § 20-924(d). Such relief may include, but is not limited to, treble damages for the wages that should have been paid; statutory damages for unlawful retaliation; and damages, including statutory damages, full compensation for wages and benefits lost, and reinstatement, for unlawful discharge. In addition, DCWP may impose on an employer found to have violated the ESSTA civil penalties not to exceed \$500.00 for a first violation, \$750.00 for a second violation within two years of the first violation, and \$1,000.00 for each succeeding violation within two years of the previous violation. When an employer has a policy or practice of not providing or refusing to allow the use of safe and sick time to its employees, DCWP may seek penalties and relief on a per employee basis.

3. Pursuant to Admin. Code § 20-924.2, (a) where reasonable cause exists to believe that an employer is engaged in a pattern or practice of violations of the ESSTA, the Corporation Counsel may commence a civil action on behalf of the City in a court of competent jurisdiction by filing a complaint setting forth facts relating to such pattern or practice and requesting relief, which may include injunctive relief, civil penalties and any other appropriate relief. Nothing in § 20-924.2 prohibits DCWP from exercising its authority under section 20-924 or the Charter, provided that a civil action pursuant to § 20-924.2 shall not have previously been commenced.

H. *More Generous Policies and Other Legal Requirements.* Nothing in the ESSTA is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous safe and sick time policy, or the obligation of an employer to comply with any contract, collective bargaining agreement, employment benefit plan or other agreement providing more generous safe and sick time. The ESSTA provides minimum requirements pertaining to safe and sick time and does not preempt, limit, or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of safe and sick leave or time, whether paid or unpaid, or that extends other protections to employees. The ESSTA may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT

March 2017

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CITY OF NEW YORK STANDARD CONSTRUCTION CONTRACT

TABLE OF CONTENTS

(NO TEXT ON THIS PAGE) 6

CHAPTER I: THE CONTRACT AND DEFINITIONS 7

ARTICLE 1. THE CONTRACT.....7

ARTICLE 2. DEFINITIONS.....7

CHAPTER II: THE WORK AND ITS PERFORMANCE 10

ARTICLE 3. CHARACTER OF THE WORK10

ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION.....10

ARTICLE 5. COMPLIANCE WITH LAWS11

ARTICLE 6. INSPECTION16

ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION.....17

CHAPTER III: TIME PROVISIONS..... 18

ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK.....18

ARTICLE 9. PROGRESS SCHEDULES18

ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL.....19

ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY19

ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS23

ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE24

ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK.....27

ARTICLE 15. LIQUIDATED DAMAGES28

ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION.....29

CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS 29

ARTICLE 17. SUBCONTRACTS29

ARTICLE 18. ASSIGNMENTS31

CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE 32

ARTICLE 19. SECURITY DEPOSIT.....32

ARTICLE 20. PAYMENT GUARANTEE.....32

ARTICLE 21. RETAINED PERCENTAGE35

ARTICLE 22. INSURANCE.....35

ARTICLE 23. MONEY RETAINED AGAINST CLAIMS.....41

ARTICLE 24. MAINTENANCE AND GUARANTY42

CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM..... 43

ARTICLE 25. CHANGES43

ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK.....43

ARTICLE 27. RESOLUTION OF DISPUTES46

ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON A TIME & MATERIALS BASIS50

ARTICLE 29. OMITTED WORK.....51

ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS51

CHAPTER VII: POWERS OF THE RESIDENT ENGINEER, THE ENGINEER OR ARCHITECT

AND THE COMMISSIONER	52
ARTICLE 31. THE RESIDENT ENGINEER	52
ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER	53
ARTICLE 33. THE COMMISSIONER	53
ARTICLE 34. NO ESTOPPEL	54
CHAPTER VIII: LABOR PROVISIONS	54
ARTICLE 35. EMPLOYEES	54
ARTICLE 36. NO DISCRIMINATION	61
ARTICLE 37. LABOR LAW REQUIREMENTS	63
ARTICLE 38. PAYROLL REPORTS	68
ARTICLE 39. DUST HAZARDS	69
CHAPTER IX: PARTIAL AND FINAL PAYMENTS	69
ARTICLE 40. CONTRACT PRICE	69
ARTICLE 41. BID BREAKDOWN ON LUMP SUM	69
ARTICLE 42. PARTIAL PAYMENTS	70
ARTICLE 43. PROMPT PAYMENT	70
ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT	71
ARTICLE 45. FINAL PAYMENT	72
ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT	73
ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION	73
CHAPTER X: CONTRACTOR’S DEFAULT.....	74
ARTICLE 48. COMMISSIONER’S RIGHT TO DECLARE CONTRACTOR IN DEFAULT	74
ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT	75
ARTICLE 50. QUITTING THE SITE	75
ARTICLE 51. COMPLETION OF THE WORK	75
ARTICLE 52. PARTIAL DEFAULT	76
ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK	76
ARTICLE 54. OTHER REMEDIES	76
CHAPTER XI: MISCELLANEOUS PROVISIONS	77
ARTICLE 55. CONTRACTOR’S WARRANTIES	77
ARTICLE 56. CLAIMS AND ACTIONS THEREON	77
ARTICLE 57. INFRINGEMENT	78
ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES	78
ARTICLE 59. SERVICE OF NOTICES	78
ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT	78
ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED	79
ARTICLE 62. TAX EXEMPTION	79
ARTICLE 63. INVESTIGATION(S) CLAUSE	80
ARTICLE 64. TERMINATION BY THE CITY	82
ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE	85
ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT	85
ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM	86
ARTICLE 68. ANTITRUST	87
ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS	87
ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB	89
ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS	89
ARTICLE 72. CONFLICTS OF INTEREST	89

ARTICLE 73. MERGER CLAUSE89

ARTICLE 74. STATEMENT OF WORK89

ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR.....90

ARTICLE 76. ELECTRONIC FUNDS TRANSFER.....90

ARTICLE 77. RECORDS RETENTION.....90

**ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER
SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS90**

**ARTICLE 79. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS
ENTERPRISES IN CITY PROCUREMENT91**

PERFORMANCE BOND #199

PERFORMANCE BOND #2.....103

PAYMENT BOND107

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WITNESSETH:

The parties, in consideration of the mutual agreements contained herein, agree as follows:

CHAPTER I: THE CONTRACT AND DEFINITIONS

ARTICLE 1. THE CONTRACT

1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as maybe specifically excluded, shall be deemed to be part of this **Contract**:

1.1.1 All provisions required by law to be inserted in this **Contract**, whether actually inserted or not;

1.1.2 The Contract Drawings and Specifications;

1.1.3 The General Conditions and Special Conditions, if any;

1.1.4 The **Contract**;

1.1.5 The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and, if used, the Bid Booklet;

1.1.6 All Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed or the Order to Work.

1.2 Should any conflict occur in or between the Drawings and Specifications, the **Contractor** shall be deemed to have estimated the most expensive way of doing the **Work**, unless the **Contractor** shall have asked for and obtained a decision in writing from the **Commissioner** of the **Agency** that is entering into this **Contract**, before the submission of its bid, as to what shall govern.

ARTICLE 2. DEFINITIONS

2.1 The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless a different meaning is clear from the context:

2.1.1 “**Addendum**” or “**Addenda**” shall mean the additional Contract provisions and/or technical clarifications issued in writing by the Commissioner prior to the receipt of bids.

2.1.2 “**Agency**” shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

2.1.3 “**Agency Chief Contracting Officer**” (**ACCO**) shall mean a person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO, or his/her duly authorized representative.

2.1.4 **“Allowance”** shall mean a sum of money which the Agency may include in the total amount of the Contract for such specific contingencies as the Agency believes may be necessary to complete the Work, *e.g.*, lead or asbestos remediation, and for which the Contractor will be paid on the basis of stipulated unit prices or a formula set forth in the Contract or negotiated between the parties provided, however, that if the Contractor is not directed to use the Allowance, the Contractor shall have no right to such money and it shall be deducted from the total amount of the Contract.

2.1.5 **“City”** shall mean the City of New York.

2.1.6 **“City Chief Procurement Officer” (CCPO)** shall mean a person delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCO and any offices which have oversight responsibility for the procurement of construction, or his/her duly authorized representative.

2.1.7 **“Commissioner”** shall mean the head of the Agency that has entered into this Contract, or his/her duly authorized representative.

2.1.8 **“Comptroller”** shall mean the Comptroller of the City of New York.

2.1.9 **“Contract”** or **“Contract Documents”** shall mean each of the various parts of the contract referred to in Article 1 hereof, both as a whole and severally.

2.1.10 **“Contract Drawings”** shall mean only those drawings specifically entitled as such and listed in the Specifications or in any Addendum, or any drawings furnished by the Commissioner, pertaining or supplemental thereto.

2.1.11 **“Contract Work”** shall mean everything required to be furnished and done by the Contractor by any one or more of the parts of the Contract referred to in Article 1, except Extra Work as hereinafter defined.

2.1.12 **“Contractor”** shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his/her successors, personal representatives, executors, administrators, and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Contract.

2.1.13 **“Days”** shall mean calendar days, except where otherwise specified.

2.1.14 **“Engineer”** or **“Architect”** or **“Project Manager”** shall mean the person so designated in writing by the Commissioner in the Notice to Proceed or the Order to Work to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be. Subject to written approval by the Commissioner, the Engineer, Architect or Project Manager may designate an authorized representative.

2.1.15 **“Engineering Audit Officer” (EAO)** shall mean the person so designated by the Commissioner to perform responsible auditing functions hereunder.

2.1.16 **“Extra Work”** shall mean Work other than that required by the Contract at the time of award which is authorized by the Commissioner pursuant to Chapter VI of this Contract.

- 2.1.17 **“Federal-Aid Contract”** shall mean a contract in which the United States (federal) Government provides financial funding as so designated in the Information for Bidders.
- 2.1.18 **“Final Acceptance”** shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.
- 2.1.19 **“Final Approved Punch List”** shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.
- 2.1.20 **“Law” or “Laws”** shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.
- 2.1.21 **“Materialman”** shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.
- 2.1.22 **“Means and Methods of Construction”** shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.
- 2.1.23 **“Notice to Proceed” or “Order to Work”** shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.
- 2.1.24 **“Other Contractor(s)”** shall mean any contractor (other than the entity which executed this Contract or its Subcontractors) who or which has a contract with the City for work on or adjacent to the building or Site of the Work.
- 2.1.25 **“Payroll Taxes”** shall mean State Unemployment Insurance (SUI), Federal Unemployment Insurance (FUI), and payments pursuant to the Federal Insurance Contributions Act (FICA).
- 2.1.26 **“Project”** shall mean the public improvement to which this Contract relates.
- 2.1.27 **“Procurement Policy Board” (PPB)** shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.
- 2.1.28 **“Required Quantity”** in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.
- 2.1.29 **“Resident Engineer”** shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.
- 2.1.30 **“Site”** shall mean the area upon or in which the Contractor’s operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.
- 2.1.31 **“Small Tools”** shall mean items that are ordinarily required for a worker’s job

function, including but not limited to, equipment that ordinarily has no licensing, insurance or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.

2.1.32 “**Specifications**” shall mean all of the directions, requirements, and standards of performance applying to the Work as hereinafter detailed and designated under the Specifications.

2.1.33 “**Subcontractor**” shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.

2.1.34 “**Substantial Completion**” shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the **Final Approved Punch List**.

2.1.35 “**Work**” shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

CHAPTER II: THE WORK AND ITS PERFORMANCE

ARTICLE 3. CHARACTER OF THE WORK

3.1 Unless otherwise expressly provided in the **Contract Drawings, Specifications, and Addenda**, the **Work** shall be performed in accordance with the best modern practice, utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship and design of the highest quality, to the satisfaction of the **Commissioner**.

ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION

4.1 Unless otherwise expressly provided in the **Contract Drawings, Specifications, and Addenda**, the **Means and Methods of Construction** shall be such as the **Contractor** may choose; subject, however, to the **Engineer’s** right to reject the **Means and Methods of Construction** proposed by the **Contractor** which in the opinion of the **Engineer**:

4.1.1 Will constitute or create a hazard to the **Work**, or to persons or property; or

4.1.2 Will not produce finished **Work** in accordance with the terms of the **Contract**; or

4.1.3 Will be detrimental to the overall progress of the **Project**.

4.2 The **Engineer’s** approval of the **Contractor’s Means and Methods of Construction**, or his/her failure to exercise his/her right to reject such means or methods, shall not relieve the **Contractor** of its obligation to complete the **Work** as provided in this **Contract**; nor shall the exercise of such right to reject

create a cause of action for damages.

ARTICLE 5. COMPLIANCE WITH LAWS

5.1 The **Contractor** shall comply with all **Laws** applicable to this **Contract** and to the **Work** to be done hereunder.

5.2 Procurement Policy Board Rules: This **Contract** is subject to the Rules of the **PPB** (“**PPB Rules**”) in effect at the time of the bid opening for this **Contract**. In the event of a conflict between the **PPB Rules** and a provision of this **Contract**, the **PPB Rules** shall take precedence.

5.3 Noise Control Code provisions.

5.3.1 In accordance with the provisions of Section 24-216(b) of the Administrative Code of the **City** (“**Administrative Code**”), Noise Abatement Contract Compliance, devices and activities which will be operated, conducted, constructed or manufactured pursuant to this **Contract** and which are subject to the provisions of the **City** Noise Control Code shall be operated, conducted, constructed, or manufactured without causing a violation of the Administrative Code. Such devices and activities shall incorporate advances in the art of noise control development for the kind and level of noise emitted or produced by such devices and activities, in accordance with regulations issued by the **Commissioner** of the **City** Department of Environmental Protection.

5.3.2 The **Contractor** agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York (“**RCNY**”) Section 28-100 *et seq.* In accordance with such provisions, the **Contractor**, if the **Contractor** is the responsible party under such regulations, shall prepare and post a Construction Noise Mitigation Plan at each **Site**, in which the **Contractor** shall certify that all construction tools and equipment have been maintained so that they operate at normal manufacturers operating specifications. If the **Contractor** cannot make this certification, it must have in place an Alternative Noise Mitigation Plan approved by the **City** Department of Environmental Protection. In addition, the **Contractor**’s certified Construction Noise Mitigation Plan is subject inspection by the **City** Department of Environmental Protection in accordance with Section 28-101 of Title 15 of RCNY. No **Contract Work** may take place at a **Site** unless there is a Construction Noise Mitigation Plan or approved Alternative Noise Mitigation Plan in place. In addition, the **Contractor** shall create and implement a noise mitigation training program. Failure to comply with these requirements may result in fines and other penalties pursuant to the applicable provisions of the Administrative Code and RCNY.

5.4 Ultra Low Sulfur Diesel Fuel: In accordance with the provisions of Section 24-163.3 of the Administrative Code, the **Contractor** specifically agrees as follows:

5.4.1 Definitions. For purposes of this Article 5.4, the following definitions apply:

5.4.1(a) “**Contractor**” means any person or entity that enters into a Public Works Contract with a **City Agency**, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

5.4.1(b) “**Motor Vehicle**” means any self-propelled vehicle designed for transporting

persons or property on a street or highway.

5.4.1(c) “Nonroad Engine” means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.4.1(d) “Nonroad Vehicle” means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this term shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) horsepower or less and that are not used in any construction program or project.

5.4.1(e) “Public Works Contract” means a contract with a **City Agency** for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a **City Agency** for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a **City Agency** for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.

5.4.1(f) “Ultra Low Sulfur Diesel Fuel” means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.4.2 Ultra Low Sulfur Diesel Fuel

5.4.2(a) All **Contractors** shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this **Contract**.

5.4.2(b) Notwithstanding the requirements of Article 5.4.2(a), **Contractors** may use diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) to fulfill the requirements of this Article 5.4.2, where the Commissioner of the **City Department of Environmental Protection** (“DEP Commissioner”) has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of **Agencies** and **Contractors**. Any such determination shall expire after six (6) months unless renewed.

5.4.2(c) **Contractors** shall not be required to comply with this Article 5.4.2 where the **City Agency** letting this **Contract** makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such **Contractor** in its fulfillment of the requirements of this **Contract**, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per

million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) **Days**, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the **City Agency** renews the finding in writing and such renewal is approved by the DEP Commissioner.

5.4.2(d) **Contractors** may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at www.dep.nyc.gov or by contacting the **City Agency** letting this **Contract**.

5.4.2(e) The requirements of this Article 5.4.2 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.3 Best Available Technology

5.4.3(a) All **Contractors** shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this **Contract**. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, **Contractors** shall comply with the regulations of the **City Department of Environmental Protection**, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The **Contractor** shall fully document all steps in the best available technology selection process and shall furnish such documentation to the **City Agency** or the DEP Commissioner upon request. The **Contractor** shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.

5.4.3(b) No **Contractor** shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Article 5.4.3 within three (3) years of having first utilized such technology for such vehicle.

5.4.3(c) This Article 5.4.3 shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty (20) **Days**.

5.4.3(d) The **Contractor** shall not be required to comply with this Article 5.4.3 with respect to a diesel-powered Nonroad Vehicle under the following circumstances:

5.4.3(d)(i) Where the **City Agency** makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by this Article 5.4.3 is unavailable for such vehicle, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the Contractor having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

5.4.3(d)(iii) In determining which technology to use for the purposes of Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above, the **Contractor** shall primarily consider the reduction in emissions of particulate matter and secondarily consider the reduction in emissions of nitrogen oxides associated with the use of such technology, which shall in no event result in an increase in the emissions of either such pollutant.

5.4.3(d)(iv) The **Contractor** shall submit requests for a finding or a waiver pursuant to this Article 5.4.3(d) in writing to the DEP Commissioner, with a copy to the **ACCO** of the **City Agency** letting this **Contract**. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above shall expire after one hundred eighty (180) **Days**, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the **City Agency** renews the finding, in writing, and the DEP Commissioner approves such finding, in writing, or the DEP Commissioner renews the waiver, in writing.

5.4.3(e) The requirements of this Article 5.4.3 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.4 Section 24-163 of the Administrative Code. The **Contractor** shall comply with Section 24-163 of the Administrative Code related to the idling of the engines of motor vehicles while parking.

5.4.5 Compliance

5.4.5(a) The **Contractor's** compliance with Article 5.4 may be independently monitored. If it is determined that the **Contractor** has failed to comply with any provision of Article 5.4, any costs associated with any independent monitoring incurred by the **City** shall be reimbursed by the **Contractor**.

5.4.5(b) Any **Contractor** who violates any provision of Article 5.4, except as provided in Article 5.4.5(c) below, shall be liable for a civil penalty between the amounts of one thousand (\$1,000) and ten thousand (\$10,000) dollars, in addition to twice the amount of money saved by such **Contractor** for failure to comply with Article 5.4.

5.4.5(c) No **Contractor** shall make a false claim with respect to the provisions of Article 5.4 to a **City Agency**. Where a **Contractor** has been found to have done so, such **Contractor** shall be liable for a civil penalty of twenty thousand (\$20,000) dollars, in addition to twice the amount of money saved by such **Contractor** in association with having made such false claim.

5.4.6 Reporting

5.4.6(a) For all Public Works Contracts covered by this Article 5.4, the **Contractor** shall report to the **City Agency** the following information:

5.4.6(a)(i) The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;

5.4.6(a)(ii) The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;

5.4.6(a)(iii) The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;

5.4.6(a)(iv) The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Article 5.4.3, including a breakdown by vehicle model and the type of technology used for each such vehicle;

5.4.6(a)(v) The locations where such Nonroad Vehicles were used; and

5.4.6(a)(vi) Where a determination is in effect pursuant to Article 5.4.2(b) or 5.4.2(c), detailed information concerning the **Contractor's** efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm).

5.4.6(b) The **Contractor** shall submit the information required by Article 5.4.6(a) at the completion of **Work** under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover **Work** performed during the preceding fiscal year (July 1 - June 30).

5.5 Ultra Low Sulfur Diesel Fuel. In accordance with the Coordinated Construction Act for Lower Manhattan, as amended:

5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:

5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.

5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the **City** known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.

5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used

solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.

5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.5.2 Requirements. **Contractors** and **Subcontractors** are required to use only Ultra Low Sulfur Diesel Fuel to power the diesel-powered Nonroad Vehicles with engine HP rating of fifty (50) HP and above used on a Lower Manhattan Redevelopment Project and, where practicable, to reduce the emission of pollutants by retrofitting such Nonroad Vehicles with oxidation catalysts, particulate filters, or technology that achieves lowest particulate matter emissions.

5.6 Pesticides. In accordance with Section 17-1209 of the Administrative Code, to the extent that the **Contractor** or any **Subcontractor** applies pesticides to any property owned or leased by the **City**, the **Contractor**, and any **Subcontractor** shall comply with Chapter 12 of the Administrative Code.

5.7 Waste Treatment, Storage, and Disposal Facilities and Transporters. In connection with the **Work**, the **Contractor** and any **Subcontractor** shall use only those waste treatment, storage, and disposal facilities and waste transporters that possess the requisite license, permit or other governmental approval necessary to treat, store, dispose, or transport the waste, materials or hazardous substances.

5.8 Environmentally Preferable Purchasing. The **Contractor** shall ensure that products purchased or leased by the **Contractor** or any **Subcontractor** for the **Work** that are not specified by the **City** or are submitted as equivalents to a product specified by the **City** comply with the requirements of the New York City Environmentally Preferable Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

ARTICLE 6. INSPECTION

6.1 During the progress of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall at all times afford the representatives of the **City** every reasonable, safe, and proper facility for inspecting all **Work** done or being done at the **Site** and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.

6.2 The **Contractor's** obligation hereunder shall include the uncovering or taking down of finished **Work** and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if **Work** thus exposed proves satisfactory, and if the **Contractor** has complied with Article 6.1, such uncovering or taking down and restoration shall be considered an item of **Extra Work** to be paid for in accordance with the provisions of Article 26. If the **Work** thus exposed proves unsatisfactory, the **City** has no obligation to compensate the **Contractor** for the uncovering, taking down or restoration.

6.3 Inspection and approval by the **Commissioner**, the **Engineer**, **Project Manager**, or **Resident Engineer**, of finished **Work** or of **Work** being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the **Contractor** of its obligation to perform the **Work** in strict accordance with the **Contract**. Finished or unfinished **Work** not found to be in strict accordance with the

Contract shall be replaced as directed by the **Engineer**, even though such **Work** may have been previously approved and paid for. Such corrective **Work** is **Contract Work** and shall not be deemed **Extra Work**.

6.4 Rejected **Work** and materials shall be promptly taken down and removed from the **Site**, which must at all times be kept in a reasonably clean and neat condition.

ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION

7.1 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall be under an absolute obligation to protect the finished and unfinished **Work** against any damage, loss, injury, theft and/or vandalism and in the event of such damage, loss, injury, theft and/or vandalism, it shall promptly replace and/or repair such **Work** at the **Contractor's** sole cost and expense, as directed by the **Resident Engineer**. The obligation to deliver finished **Work** in strict accordance with the **Contract** prior to **Final Acceptance** shall be absolute and shall not be affected by the **Resident Engineer's** approval of, or failure to prohibit, the **Means and Methods of Construction** used by the **Contractor**.

7.2 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall take all reasonable precautions to protect all persons and the property of the **City** and of others from damage, loss or injury resulting from the **Contractor's**, and/or its **Subcontractors'** operations under this **Contract**. The **Contractor's** obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the **Site** suitable and sufficient protection such as lights, barricades, and enclosures.

7.3 The **Contractor** shall comply with the notification requirements set forth below in the event of any loss, damage or injury to **Work**, persons or property, or any accidents arising out of the operations of the **Contractor** and/or its **Subcontractors** under this **Contract**.

7.3.1 The **Contractor** shall make a full and complete report in writing to the **Resident Engineer** within three (3) **Days** after the occurrence.

7.3.2 The **Contractor** shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the **Contractor's** own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the **City** and/or the **Engineer, Architect, or Project Manager** are Additional Insureds, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured."

7.3.2(a) Whenever such notice is sent under a policy on which the **City** is an Additional Insured, the **Contractor** shall provide copies of the notice to the **Comptroller, the Commissioner** and the **City Corporation Counsel**. The copy to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, New York, 10007. The copy to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the **City Corporation Counsel** shall be sent to Insurance Claims Specialist, Affirmative Litigation

Division, New York City Law Department, 100 Church Street, New York, New York 10007.

7.3.2(b) If the **Contractor** fails to provide any of the foregoing notices to any appropriate insurance carrier(s) in a timely and complete manner, the **Contractor** shall indemnify the **City** for all losses, judgments, settlements, and expenses, including reasonable attorneys' fees, arising from an insurer's disclaimer of coverage citing late notice by or on behalf of the **City**.

7.4 To the fullest extent permitted by law, the **Contractor** shall defend, indemnify, and hold the **City**, its employees, and officials (the "Indemnitees") harmless against any and all claims (including but not limited to claims asserted by any employee of the **Contractor** and/or its **Subcontractors**) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys' fees and disbursements) allegedly arising out of or in any way related to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract** or from the **Contractor's** and/or its **Subcontractors'** failure to comply with any of the provisions of this **Contract** or of the **Law**. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of **Law** or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing or contributing to the underlying claim (in which case, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault whether by statute, by operation of **Law**, or otherwise). Where partial indemnity is provided hereunder, all costs and expenses shall be indemnified on a pro rata basis.

7.4.1 Indemnification under Article 7.4 or any other provision of the **Contract** shall operate whether or not **Contractor** or its **Subcontractors** have placed and maintained the insurance specified under Article 22.

7.5 The provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the **Contractor** or the **City**.

CHAPTER III: TIME PROVISIONS

ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK

8.1 The **Contractor** shall commence the **Work** on the date specified in the **Notice to Proceed** or the **Order to Work**. The time for performance of the **Work** under the **Contract** shall be computed from the date specified in the **Notice to Proceed** or the **Order to Work**. **TIME BEING OF THE ESSENCE** to the **City**, the **Contractor** shall thereafter prosecute the **Work** diligently, using such **Means and Methods of Construction** as are in accord with Article 4 herein and as will assure its completion not later than the date specified in this **Contract**, or on the date to which the time for completion may be extended.

ARTICLE 9. PROGRESS SCHEDULES

9.1 To enable the **Work** to be performed in an orderly and expeditious manner, the **Contractor**, within fifteen (15) **Days** after the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule based on the Critical Path Method in the form of

a bar graph or in such other form as specified by the **Engineer**, and monthly cash flow requirements, showing:

9.1.1 The anticipated time of commencement and completion of each of the various operations to be performed under this **Contract**; and

9.1.2 The sequence and interrelation of each of these operations with the others and with those of other related contracts; and

9.1.3 The estimated time required for fabrication or delivery, or both, of all materials and equipment required for the **Work**, including the anticipated time for obtaining required approvals pursuant to Article 10; and

9.1.4 The estimated amount in dollars the **Contractor** will claim on a monthly basis.

9.2 The proposed schedule shall be revised as directed by the **Engineer**, until finally approved by the **Engineer**, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the **Contractor**.

9.3 If the **Contractor** shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional **Means and Methods of Construction**, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the **City** of a progress schedule which is shorter than the time allotted under the **Contract** shall not create any liability for the **City** if the approved progress schedule is not met.

9.4 The **Contractor** will not receive any payments until the proposed progress schedule is submitted.

ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL

10.1 From time to time as the **Work** progresses and in the sequence indicated by the approved progress schedule, the **Contractor** shall submit to the **Engineer** a specific request in writing for each item of information or approval required by the **Contractor**. These requests shall state the latest date upon which the information or approval is actually required by the **Contractor**, and shall be submitted in a reasonable time in advance thereof to provide the **Engineer** a sufficient time to act upon such submissions, or any necessary re-submissions thereof.

10.2 The **Contractor** shall not have any right to an extension of time on account of delays due to the **Contractor's** failure to submit requests for the required information or the required approval in accordance with the above requirements.

ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY

11.1 After the commencement of any condition which is causing or may cause a delay in completion of the **Work**, including conditions for which the **Contractor** may be entitled to an extension of time, the following notifications and submittals are required:

11.1.1 Within fifteen (15) **Days** after the **Contractor** becomes aware or reasonably should be

aware of each such condition, the **Contractor** must notify the **Resident Engineer** or **Engineer**, as directed by the **Commissioner**, in writing of the existence, nature and effect of such condition upon the approved progress schedule and the **Work**, and must state why and in what respects, if any, the condition is causing or may cause a delay. Such notice shall include a description of the construction activities that are or could be affected by the condition and may include any recommendations the **Contractor** may have to address the delay condition and any activities the **Contractor** may take to avoid or minimize the delay.

11.1.2 If the **Contractor** shall claim to be sustaining damages for delay as provided for in this Article 11, within forty-five (45) **Days** from the time such damages are first incurred for each such condition, the **Contractor** shall submit to the **Commissioner** a verified written statement of the details and estimates of the amounts of such damages, including categories of expected damages and projected monthly costs, together with documentary evidence of such damages as the **Contractor** may have at the time of submission (“statement of delay damages”), as further detailed in Article 11.6. The **Contractor** may submit the above statement within such additional time as may be granted by the **Commissioner** in writing upon written request therefor.

11.1.3 Articles 11.1.1 and 11.1.2 do not relieve the **Contractor** of its obligation to comply with the provisions of Article 44.

11.2 Failure of the **Contractor** to strictly comply with the requirements of Article 11.1.1 may, in the discretion of the **Commissioner**, be deemed sufficient cause to deny any extension of time on account of delay arising out of such condition. Failure of the **Contractor** to strictly comply with the requirements of both Articles 11.1.1 and 11.1.2 shall be deemed a conclusive waiver by the **Contractor** of any and all claims for damages for delay arising from such condition and no right to recover on such claims shall exist.

11.3 When appropriate and directed by the **Engineer**, the progress schedule shall be revised by the **Contractor** until finally approved by the **Engineer**. The revised progress schedule must be strictly adhered to by the **Contractor**.

11.4 Compensable Delays

11.4.1 The **Contractor** agrees to make claim only for additional costs attributable to delay in the performance of this **Contract** necessarily extending the time for completion of the **Work** or resulting from acceleration directed by the **Commissioner** and required to maintain the progress schedule, occasioned solely by any act or omission to act of the **City** listed below. The **Contractor** also agrees that delay from any other cause shall be compensated, if at all, solely by an extension of time to complete the performance of the **Work**.

11.4.1.1 The failure of the **City** to take reasonable measures to coordinate and progress the **Work** to the extent required by the **Contract**, except that the **City** shall not be responsible for the **Contractor’s** obligation to coordinate and progress the **Work** of its **Subcontractors**.

11.4.1.2 Unreasonable delays attributable to the review of shop drawings, the issuance of change orders, or the cumulative impact of change orders that were not brought about by any act or omission of the **Contractor**.

11.4.1.3 The unavailability of the **Site** caused by acts or omissions of the **City**.

11.4.1.4 The issuance by the **Engineer** of a stop work order that was not brought about through any act or omission of the **Contractor**.

11.4.1.5 Differing site conditions or environmental hazards that were neither known nor reasonably ascertainable on a pre-bid inspection of the **Site** or review

of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project's** geographical area or neighborhood or in the type of **Work** to be performed.

11.4.1.6 Delays caused by the **City's** bad faith or its willful, malicious, or grossly negligent conduct;

11.4.1.7 Delays not contemplated by the parties;

11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the **Contract** by the **City**; and

11.4.1.9 Delays resulting from the **City's** breach of a fundamental obligation of the **Contract**.

11.4.2 No claim may be made for any alleged delay in **Substantial Completion** of the **Work** if the **Work** will be or is substantially completed by the date of **Substantial Completion** provided for in Schedule A unless acceleration has been directed by the **Commissioner** to meet the date of **Substantial Completion** set forth in Schedule A, or unless there is a provision in the **Contract** providing for additional compensation for early completion.

11.4.3 The provisions of this Article 11 apply only to claims for additional costs attributable to delay and do not preclude determinations by the **Commissioner** allowing reimbursements for additional costs for **Extra Work** pursuant to Articles 25 and 26 of this **Contract**. To the extent that any cost attributable to delay is reimbursed as part of a change order, no additional claim for compensation under this Article 11 shall be allowed.

11.5 Non-Compensable Delays. The **Contractor** agrees to make no claim for, and is deemed to have included in its bid prices for the various items of the **Contract**, the extra/additional costs attributable to any delays caused by or attributable to the items set forth below. For such items, the **Contractor** shall be compensated, if at all, solely by an extension of time to complete the performance of the **Work**, in accordance with the provisions of Article 13. Such extensions of time will be granted, if at all, pursuant to the grounds set forth in Article 13.3.

11.5.1 The acts or omissions of any third parties, including but not limited to **Other Contractors**, public/ governmental bodies (other than **City Agencies**), utilities or private enterprises, who are disclosed in the **Contract Documents** or are ordinarily encountered or generally recognized as related to the **Work**;

11.5.2 Any situation which was within the contemplation of the parties at the time of entering into the **Contract**, including any delay indicated or disclosed in the **Contract Documents** or that would be generally recognized by a reasonably prudent contractor as related to the nature of the **Work**, and/or the existence of any facility or appurtenance owned, operated or maintained by any third party, as indicated or disclosed in the **Contract Documents** or ordinarily encountered or generally recognized as related to the nature of the **Work**;

11.5.3 Restraining orders, injunctions or judgments issued by a court which were caused by a Contractor's submission, action or inaction or by a Contractor's **Means and Methods of Construction**, or by third parties, unless such order, injunction or judgment was the result of an act or omission by the **City**;

11.5.4 Any labor boycott, strike, picketing, lockout or similar situation;

11.5.5 Any shortages of supplies or materials, or unavailability of equipment, required by the **Contract Work**;

11.5.6 Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides or other catastrophes or acts of God, or acts of war or of the public enemy or terrorist acts, including the **City's** reasonable responses thereto; and

11.5.7 **Extra Work** which does not significantly affect the overall completion of the **Contract**, reasonable delays in the review or issuance of change orders or field orders and/or in shop drawing reviews or approvals.

11.6 Required Content of Submission of Statement of Delay Damages

11.6.1 In the verified written statement of delay damages required by Article 11.1.2, the following information shall be provided by the **Contractor**:

11.6.1.1 For each delay, the start and end dates of the claimed periods of delay and, in addition, a description of the operations that were delayed, an explanation of how they were delayed, and the reasons for the delay, including identifying the applicable act or omission of the City listed in Article 11.4.

11.6.1.2 A detailed factual statement of the claim providing all necessary dates, locations and items of **Work** affected by the claim.

11.6.1.3 The estimated amount of additional compensation sought and a breakdown of that amount into categories as described in Article 11.7.

11.6.1.4 Any additional information requested by the **Commissioner**.

11.7 Recoverable Costs

11.7.1 Delay damages may be recoverable for the following costs actually and necessarily incurred in the performance of the **Work**:

11.7.1.1 Direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits, based on time and materials records;

11.7.1.2 Necessary materials (including transportation to the **Site**), based on time and material records;

11.7.1.3 Reasonable rental value of necessary plant and equipment other than small tools, plus fuel/energy costs according to the applicable formula set forth in Articles 26.2.4 and/or 26.2.8, based on time and material records;

11.7.1.4 Additional insurance and bond costs;

11.7.1.5 Extended **Site** overhead, field office rental, salaries of field office staff, on-site project managers and superintendents, field office staff vehicles, **Project**-specific storage, field office utilities and telephone, and field office consumables;

11.7.1.6 Labor escalation costs based on actual costs;

11.7.1.7 Materials and equipment escalation costs based on applicable industry indices unless documentation of actual increased cost is provided;

11.7.1.8 Additional material and equipment storage costs based on actual documented costs and additional costs necessitated by extended manufacturer warranty periods; and

11.7.1.9 Extended home office overhead calculated based on the following formula:

(1) Subtract from the original **Contract** amount the amount earned by original contractual **Substantial Completion** date (not

- including change orders);
- (2) Remove 15% overhead and profit from the calculation in item (1) by dividing the results of item (1) by 1.15;
- (3) Multiply the result of item (2) by 7.25% for the total home office overhead;
- (4) Multiply the result of item (3) by 7.25% for the total profit; and
- (5) The total extended home office overhead will be the total of items (3) and (4).

11.7.2 Recoverable Subcontractor Costs. When the **Work** is performed by a **Subcontractor**, the **Contractor** may be paid the actual and necessary costs of such subcontracted **Work** as outlined above in Articles 11.7.1.1 through 11.7.1.8, and an additional overhead of 5% of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.

11.7.3 Non-Recoverable Costs. The parties agree that the **City** will have no liability for the following items and the **Contractor** agrees it shall make no claim for the following items:

- 11.7.3.1 Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;
- 11.7.3.2 Consequential damages, including, but not limited to, construction or bridge loans or interest paid on such loans, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;
- 11.7.3.3 Indirect costs or expenses of any nature except those included in Article 11.7.1;
- 11.7.3.4 Direct or indirect costs attributable to performance of **Work** where the **Contractor**, because of situations or conditions within its control, has not progressed the **Work** in a satisfactory manner; and
- 11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

11.8 Any claims for delay under this Article 11 are not subject to the jurisdiction of the Contract Dispute Resolution Board pursuant to the dispute resolution process set forth in Article 27.

11.9 Any compensation provided to the **Contractor** in accordance with this Article 11 will be made pursuant to a claim filed with the **Comptroller**. Nothing in this Article 11 extends the time for the **Contractor** to file an action with respect to a claim within six months after **Substantial Completion** pursuant to Article 56.

ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

12.1 During the progress of the **Work**, **Other Contractors** may be engaged in performing other work or may be awarded other contracts for additional work on this **Project**. In that event, the **Contractor** shall coordinate the **Work** to be done hereunder with the work of such **Other Contractors** and the **Contractor** shall fully cooperate with such **Other Contractors** and carefully fit its own **Work** to that provided under other contracts as may be directed by the **Engineer**. The **Contractor** shall not commit or permit any act which will interfere with the performance of work by any **Other Contractors**.

12.2 If the **Engineer** determines that the **Contractor** is failing to coordinate its **Work** with the work of **Other Contractors** as the **Engineer** has directed, then the **Commissioner** shall have the right to withhold any payments otherwise due hereunder until the **Contractor** completely complies with the **Engineer's** directions.

12.3 The **Contractor** shall notify the **Engineer** in writing if any **Other Contractor** on this **Project** is failing to coordinate its work with the **Work** of this **Contract**. If the **Engineer** finds such charges to be true, the **Engineer** shall promptly issue such directions to the **Other Contractor** with respect thereto as the situation may require. The **City** shall not, however, be liable for any damages suffered by any **Other Contractor's** failure to coordinate its work with the **Work** of this **Contract** or by reason of the **Other Contractor's** failure to promptly comply with the directions so issued by the **Engineer**, or by reason of any **Other Contractor's** default in performance, it being understood that the **City** does not guarantee the responsibility or continued efficiency of any contractor. The **Contractor** agrees to make no claim against the **City** for any damages relating to or arising out of any directions issued by the **Engineer** pursuant to this Article 12 (including but not limited to the failure of any **Other Contractor** to comply or promptly comply with such directions), or the failure of any **Other Contractor** to coordinate its work, or the default in performance of any **Other Contractor**.

12.4 The **Contractor** shall indemnify and hold the **City** harmless from any and all claims or judgments for damages and from costs and expenses to which the **City** may be subjected or which it may suffer or incur by reason of the **Contractor's** failure to comply with the **Engineer's** directions promptly; and the **Comptroller** shall have the right to exercise the powers reserved in Article 23 with respect to any claims which may be made for damages due to the **Contractor's** failure to comply with the **Engineer's** directions promptly. Insofar as the facts and **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent provided by **Law**.

12.5 Should the **Contractor** sustain any damage through any act or omission of any **Other Contractor** having a contract with the **City** for the performance of work upon the **Site** or of work which may be necessary to be performed for the proper prosecution of the **Work** to be performed hereunder, or through any act or omission of a subcontractor of such **Other Contractor**, the **Contractor** shall have no claim against the **City** for such damage, but shall have a right to recover such damage from the **Other**

12.5 **Contractor** under the provision similar to the following provisions which apply to this Contract and have been or will be inserted in the contracts with such Other Contractors:

12.5.1 Should any **Other Contractor** having or who shall hereafter have a contract with the **City** for the performance of work upon the **Site** sustain any damage through any act or omission of the **Contractor** hereunder or through any act or omission of any **Subcontractor** of the **Contractor**, the **Contractor** agrees to reimburse such **Other Contractor** for all such damages and to defend at its own expense any action based upon such claim and if any judgment or claim (even if the allegations of the action are without merit) against the **City** shall be allowed the **Contractor** shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and agrees to indemnify and hold the **City** harmless from all such claims. Insofar as the facts and **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent provided by **Law**.

12.6 The **City's** right to indemnification hereunder shall in no way be diminished, waived or discharged by its recourse to assessment of liquidated damages as provided in Article 15, or by the exercise of any other remedy provided for by **Contract** or by **Law**.

ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE

13.1 If performance by the **Contractor** is delayed for a reason set forth in Article 13.3, the **Contractor** may be allowed a reasonable extension of time in conformance with this Article 13 and the **PPB**

Rules.

13.2 Any extension of time may be granted only by the **ACCO** or by the Board for the Extension of Time (hereafter “Board”) (as set forth below) upon written application by the **Contractor**.

13.3 Grounds for Extension: If such application is made, the **Contractor** shall be entitled to an extension of time for delay in completion of the **Work** caused solely:

13.3.1 By the acts or omissions of the **City**, its officials, agents or employees; or

13.3.2 By the act or omissions of **Other Contractors** on this **Project**; or

13.3.3 By supervening conditions entirely beyond the control of either party hereto (such as, but not limited to, acts of God or the public enemy, excessive inclement weather, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the **Contractor**).

13.3.4 The **Contractor** shall, however, be entitled to an extension of time for such causes only for the number of **Days** of delay which the **ACCO** or the Board may determine to be due solely to such causes, and then only if the **Contractor** shall have strictly complied with all of the requirements of Articles 9 and 10.

13.4 The **Contractor** shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the **Work** as determined by the **ACCO** or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the **Contractor** or of its **Subcontractors** or **Materialmen**, and would of itself (irrespective of the concurrent causes) have delayed the **Work**, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.

13.5 The determination made by the **ACCO** or the Board on an application for an extension of time shall be binding and conclusive on the **Contractor**.

13.6 The **ACCO** or the Board acting entirely within their discretion may grant an application for an extension of time for causes of delay other than those herein referred.

13.7 Permitting the **Contractor** to continue with the **Work** after the time fixed for its completion has expired, or after the time to which such completion may have been extended has expired, or the making of any payment to the **Contractor** after such time, shall in no way operate as a waiver on the part of the **City** of any of its rights under this **Contract**.

13.8 Application for Extension of Time:

13.8.1 Before the **Contractor’s** time extension request will be considered, the **Contractor** shall notify the **ACCO** of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the **ACCO** identifying:

13.8.1(a) The **Contractor**; the registration number; and **Project** description;

13.8.1(b) Liquidated damage assessment rate, as specified in the **Contract**;

13.8.1(c) Original total bid price;

13.8.1(d) The original **Contract** start date and completion date;

13.8.1(e) Any previous time extensions granted (number and duration); and

13.8.1(f) The extension of time requested.

13.8.2 In addition, the application for extension of time shall set forth in detail:

13.8.2(a) The nature of each alleged cause of delay in completing the **Work**;

13.8.2(b) The date upon which each such cause of delay began and ended and the number of **Days** attributable to each such cause;

13.8.2(c) A statement that the **Contractor** waives all claims except for those delineated in the application, and the particulars of any claims which the **Contractor** does not agree to waive. For time extensions for **Substantial Completion** and final completion payments, the application shall include a detailed statement of the dollar amounts of each element of claim item reserved; and

13.8.2(d) A statement indicating the **Contractor's** understanding that the time extension is granted only for purposes of permitting continuation of **Contract** performance and payment for **Work** performed and that the **City** retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.

13.9 Analysis and Approval of Time Extensions:

13.9.1 For time extensions for partial payments, a written determination shall be made by the **ACCO** who may, for good and sufficient cause, extend the time for the performance of the **Contract** as follows:

13.9.1(a) If the **Work** is to be completed within six (6) months, the time for performance may be extended for sixty (60) **Days**;

13.9.1(b) If the **Work** is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) **Days** may be granted;

13.9.1(c) If the **Contract** period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) **Days** may be granted for each multiple of six (6) months involved beyond the one (1) year period; or

13.9.1(d) If exceptional circumstances exist, the **ACCO** may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the **ACCO** shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.

13.9.2 For extensions of time for **Substantial Completion** and final completion payments, the **Engineer**, in consultation with the **ACCO**, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this **Contract**). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the **Agency** contract file. Neither the report itself nor anything contained therein shall operate as a

waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

13.9.3 Approval Mechanism for Time Extensions for **Substantial Completion** or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the **ACCO** of the **Agency**, the **City** Corporation Counsel, and the **Comptroller**, or their authorized representatives.

13.9.4 Neither the granting of any application for an extension of time to the **Contractor** or any **Other Contractor** on this **Project** nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the **Contractor** or its attorneys in any action or proceeding.

13.10 No Damage for Delay: The **Contractor** agrees to make no claim for damages for delay in the performance of this **Contract** occasioned by any act or omission to act of the **City** or any of its representatives, except as provided for in Article 11.

ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK

14.1 Date for **Substantial Completion**: The **Contractor** shall substantially complete the **Work** within the time fixed in Schedule A of the General Conditions, or within the time to which such **Substantial Completion** may be extended.

14.2 Determining the Date of **Substantial Completion**: The **Work** will be deemed to be substantially complete when the two conditions set forth below have been met.

14.2.1 Inspection: The **Engineer** or **Resident Engineer**, as applicable, has inspected the **Work** and has made a written determination that it is substantially complete.

14.2.2 Approval of **Final Approved Punch List** and Date for **Final Acceptance**: Following inspection of the **Work**, the **Engineer/Resident Engineer** shall furnish the **Contractor** with a final punch list, specifying all items of **Work** to be completed and proposing dates for the completion of each specified item of **Work**. The **Contractor** shall then submit in writing to the **Engineer/Resident Engineer** within ten (10) **Days** of the **Engineer/Resident Engineer** furnishing the final punch list either acceptance of the dates or proposed alternative dates for the completion of each specified item of **Work**. If the **Contractor** neither accepts the dates nor proposes alternative dates within ten (10) **Days**, the schedule proposed by the **Engineer/Resident Engineer** shall be deemed accepted. If the **Contractor** proposes alternative dates, then, within a reasonable time after receipt, the **Engineer/Resident Engineer**, in a written notification to the **Contractor**, shall approve the **Contractor's** completion dates or, if they are unable to agree, the **Engineer/Resident Engineer** shall establish dates for the completion of each item of **Work**. The latest completion date specified shall be the date for **Final Acceptance** of the **Work**.

14.3 Date of **Substantial Completion**. The date of approval of the **Final Approved Punch List**, shall be the date of **Substantial Completion**. The date of approval of the **Final Approved Punch List** shall be either (a) if the **Contractor** approves the final punch list and proposed dates for completion furnished by the **Engineer/Resident Engineer**, the date of the **Contractor's** approval; or (b) if the **Contractor** neither accepts the dates nor proposes alternative dates, ten (10) **Days** after the **Engineer/Resident Engineer** furnishes the **Contractor** with a final punch list and proposed dates for completion; or (c) if the **Contractor** proposes alternative dates, the date that the **Engineer/Resident Engineer** sends written notification to the

Contractor either approving the **Contractor's** proposed alternative dates or establishing dates for the completion for each item of **Work**.

14.4 Determining the Date of **Final Acceptance**: The **Work** will be accepted as final and complete as of the date of the **Engineer's/Resident Engineer's** inspection if, upon such inspection, the **Engineer/Resident Engineer** finds that all items on the **Final Approved Punch List** are complete and no further **Work** remains to be done. The **Commissioner** will then issue a written determination of **Final Acceptance**.

14.5 Request for Inspection: Inspection of the **Work** by the **Engineer/Resident Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within fourteen (14) **Days** after receipt of the **Contractor's** written request therefor.

14.6 Request for Re-inspection: If upon inspection for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** determines that there are items of **Work** still to be performed, the **Contractor** shall promptly perform them and then request a re-inspection. If upon re-inspection, the **Engineer/Resident Engineer** determines that the **Work** is substantially complete or finally accepted, the date of such re-inspection shall be the date of **Substantial Completion** or **Final Acceptance**. Re-inspection by the **Engineer/Resident Engineer** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

14.7 Initiation of Inspection by the **Engineer/Resident Engineer**: If the **Contractor** does not request inspection or re-inspection of the **Work** for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** may initiate such inspection or re-inspection.

ARTICLE 15. LIQUIDATED DAMAGES

15.1 In the event the **Contractor** fails to substantially complete the **Work** within the time fixed for such **Substantial Completion** in Schedule A of the General Conditions, plus authorized time extensions, or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the sum fixed in Schedule A of the General Conditions, for each and every **Day** that the time consumed in substantially completing the **Work** exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the **City** will suffer by reason of delay in the **Substantial Completion** of the **Work** hereunder, is hereby fixed and agreed as the liquidated damages that the **City** will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the **Contractor** whether or not the **Contractor** is defaulted pursuant to Chapter X of this **Contract**. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the **City's** right to indemnification, or the **Contractor's** obligation to indemnify the **City**, or to any other remedy provided for in this **Contract** or by **Law**.

15.3 The **Commissioner** may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the **City**, the **Contractor** shall be liable to pay the difference.

ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION

16.1 Unless otherwise provided for in the **Specifications**, the **Commissioner** may take over, use, occupy or operate any part of the **Work** at any time prior to **Final Acceptance**, upon written notification to the **Contractor**. The **Engineer** or **Resident Engineer**, as applicable, shall inspect the part of the **Work** to be taken over, used, occupied, or operated, and will furnish the **Contractor** with a written statement of the **Work**, if any, which remains to be performed on such part. The **Contractor** shall not object to, nor interfere with, the **Commissioner's** decision to exercise the rights granted by Article 16. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work**:

16.1.1 the **Engineer/Resident Engineer** shall issue a written determination of **Substantial Completion** with respect to such part of the **Work**;

16.1.2 the **Contractor** shall be relieved of its absolute obligation to protect such part of the unfinished **Work** in accordance with Article 7;

16.1.3 the **Contractor's** guarantee on such part of the **Work** shall begin on the date of such use by the **City**; and;

16.1.4 the **Contractor** shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the **Work**, except so much thereof as may be retained under Articles 24 and 44.

CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17. SUBCONTRACTS

17.1 The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price fixed in Schedule A of the General Conditions, without prior written permission from the **Commissioner**. All subcontracts made by the **Contractor** shall be in writing. No **Work** may be performed by a **Subcontractor** prior to the **Contractor** entering into a written subcontract with the **Subcontractor** and complying with the provisions of this Article 17.

17.2 Before making any subcontracts, the **Contractor** shall submit a written statement to the **Commissioner** giving the name and address of the proposed **Subcontractor**; the portion of the **Work** and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the **Commissioner**; and any other information tending to prove that the proposed **Subcontractor** has the necessary facilities, skill, integrity, past experience, and financial resources to perform the **Work** in accordance with the terms and conditions of this **Contract**.

17.3 In addition to the requirements in Article 17.2, **Contractor** is required to list the **Subcontractor** in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip.¹ For each **Subcontractor** listed, **Contractor** is required to provide the following information: maximum contract value, description of **Subcontractor's** Work, start and end date of the subcontract and identification of the **Subcontractor's** industry. Thereafter, **Contractor** will be required to report in the system the payments made to each **Subcontractor** within 30 days of making the

¹ In order to use the new system, a PIP account will be required. Detailed instructions on creating a PIP account and using the new system are also available at www.nyc.gov/pip. Additional assistance with PIP may be obtained by emailing the Financial Information Services Agency Help Desk at pip@fisa.nyc.gov.

payment. If any of the required information changes throughout the Term of the **Contract**, **Contractor** will be required to revise the information in the system.

Failure of the **Contractor** to list a **Subcontractor** and/or to report **Subcontractor** payments in a timely fashion may result in the **Commissioner** declaring the **Contractor** in default of the **Contract** and will subject **Contractor** to liquidated damages in the amount of \$100 per day for each day that the **Contractor** fails to identify a **Subcontractor** along with the required information about the **Subcontractor** and/or fails to report payments to a **Subcontractor**, beyond the time frames set forth herein or in the notice from the **City**. Article 15 shall govern the issue of liquidated damages.

17.4 If an approved **Subcontractor** elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.

17.5 The **Commissioner** will notify the **Contractor** in writing whether the proposed **Subcontractor** is approved. If the proposed **Subcontractor** is not approved, the **Contractor** may submit another proposed **Subcontractor** unless the **Contractor** decides to do the **Work**. No **Subcontractor** shall be permitted to enter or perform any work on the **Site** unless approved.

17.6 Before entering into any subcontract hereunder, the **Contractor** shall provide the proposed **Subcontractor** with a complete copy of this document and inform the proposed **Subcontractor** fully and completely of all provisions and requirements of this **Contract** relating either directly or indirectly to the **Work** to be performed and the materials to be furnished under such subcontract, and every such **Subcontractor** shall expressly stipulate that all labor performed and materials furnished by the **Subcontractor** shall strictly comply with the requirements of this **Contract**.

17.7 Documents given to a prospective **Subcontractor** for the purpose of soliciting the **Subcontractor's** bid shall include either a copy of the bid cover or a separate information sheet setting forth the **Project** name, the **Contract** number (if available), the **Agency** (as noted in Article 2.1.6), and the **Project's** location.

17.8 The **Commissioner's** approval of a **Subcontractor** shall not relieve the **Contractor** of any of its responsibilities, duties, and liabilities hereunder. The **Contractor** shall be solely responsible to the **City** for the acts or defaults of its **Subcontractor** and of such **Subcontractor's** officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the **Contractor** to the extent of its subcontract.

17.9 If the **Subcontractor** fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the **Contractor's** failure to make payments where required) to perform the **Work** in accordance with the terms and conditions of this **Contract**, the **Contractor** shall promptly notify the **Commissioner** and replace such **Subcontractor** with a newly approved **Subcontractor** in accordance with this Article 17.

17.10 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** maintain all insurance required by **Law**.

17.11 The **Contractor** shall promptly, upon request, file with the **Engineer** a conformed copy of the subcontract and its cost. The subcontract shall provide the following:

17.11.1 Payment to **Subcontractors**: The agreement between the **Contractor** and its **Subcontractor** shall contain the same terms and conditions as to method of payment for **Work**, labor, and materials, and as to retained percentages, as are contained in this **Contract**.

17.11.2 Prevailing Rate of Wages: The agreement between the **Contractor** and its **Subcontractor** shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.

17.11.3 Section 6-123 of the Administrative Code: Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the **Contractor** and a **Subcontractor** in excess of fifty thousand (\$50,000) dollars shall include a provision that the **Subcontractor** shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 *et seq.*).

17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the **Work**.

17.12 The **Commissioner** may deduct from the amounts certified under this **Contract** to be due to the **Contractor**, the sum or sums due and owing from the **Contractor** to the **Subcontractors** according to the terms of the said subcontracts, and in case of dispute between the **Contractor** and its **Subcontractor**, or **Subcontractors**, as to the amount due and owing, the **Commissioner** may deduct and withhold from the amounts certified under this **Contract** to be due to the **Contractor** such sum or sums as may be claimed by such **Subcontractor**, or **Subcontractors**, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.

17.13 On contracts where performance bonds and payment bonds are executed, the **Contractor** shall include on each requisition for payment the following data: **Subcontractor's** name, value of the subcontract, total amount previously paid to **Subcontractor** for **Work** previously requisitioned, and the amount, including retainage, to be paid to the **Subcontractor** for **Work** included in the requisition.

17.14 On **Contracts** where performance bonds and payment bonds are not executed, the **Contractor** shall include with each requisition for payment submitted hereunder, a signed statement from each and every **Subcontractor** and/or **Materialman** for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the **Subcontractor** and/or **Materialman** for whom payment is requested and shall (i) verify that such **Subcontractor** and/or **Materialman** has been paid in full for all **Work** performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

ARTICLE 18. ASSIGNMENTS

18.1 The **Contractor** shall not assign, transfer, convey or otherwise dispose of this **Contract**, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this **Contract**, unless the previous written consent of the **Commissioner** shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.

18.2 Such assignment, transfer, conveyance or other disposition of this **Contract** shall not be valid until filed in the office of the **Commissioner** and the **Comptroller**, with the written consent of the **Commissioner** endorsed thereon or attached thereto.

18.3 Failure to obtain the previous written consent of the **Commissioner** to such an assignment,

transfer, conveyance or other disposition, may result in the revocation and annulment of this **Contract**. The **City** shall thereupon be relieved and discharged from any further liability to the **Contractor**, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the **Contract**, except so much as may be required to pay the **Contractor's** employees.

18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the **Contractor** for the benefit of its creditors made pursuant to the **Laws** of the State of New York.

18.5 This **Contract** may be assigned by the **City** to any corporation, agency or instrumentality having authority to accept such assignment.

CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE

ARTICLE 19. SECURITY DEPOSIT

19.1 If performance and payment bonds are required, the **City** shall retain the bid security to ensure that the successful bidder executes the **Contract** and furnishes the required payment and performance security within ten (10) **Days** after notice of the award of the **Contract**. If the successful bidder fails to execute the **Contract** and furnish the required payment and performance security, the **City** shall retain such bid security as set forth in the Information for Bidders. If the successful bidder executes the **Contract** and furnishes the required payment and performance security, the **City** shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the **Contract** by the **City**.

19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor's** faithful performance of the **Contract**. If partial payments are provided, the bid security will be returned to the **Contractor** after the sum retained under Article 21 equals the amount of the bid security, subject to other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment.

19.3 If the **Contractor** is declared in default under Article 48 prior to the return of the deposit, or if any claim is made such as referred to in Article 23, the amount of such deposit, or so much thereof as the **Comptroller** may deem necessary, may be retained and then applied by the **Comptroller**:

19.3.1 To compensate the **City** for any expense, loss or damage suffered or incurred by reason of or resulting from such default, including the cost of re-letting and liquidated damages; or

19.3.2 To indemnify the **City** against any and all claims.

ARTICLE 20. PAYMENT GUARANTEE

20.1 On **Contracts** where one hundred (100%) percent performance bonds and payment bonds are executed, this Article 20 does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond or where the **Contract** does not require a payment bond for one hundred (100%) percent of the **Contract** price, the **City** shall, in accordance with the terms of this Article 20, guarantee payment of all lawful claims for:

20.2.1 Wages and compensation for labor performed and/or services rendered; and

20.2.2 Materials, equipment, and supplies provided, whether incorporated into the **Work** or not, when demands have been filed with the **City** as provided hereinafter by any person, firm, or corporation which furnished labor, material, equipment, supplies, or any combination thereof, in connection with the **Work** performed hereunder (hereinafter referred to as the “beneficiary”) at the direction of the **City** or the **Contractor**.

20.3 The provisions of Article 20.2 are subject to the following limitations and conditions:

20.3.1 If the **Contractor** provides a payment bond for a value that is less than one hundred (100%) percent of the value of the **Contract Work**, the payment bond provided by the **Contractor** shall be primary (and non-contributing) to the payment guarantee provided under this Article 20.

20.3.2 The guarantee is made for the benefit of all beneficiaries as defined in Article 20.2 provided that those beneficiaries strictly adhere to the terms and conditions of Article 20.3.4 and 20.3.5.

20.3.3 Nothing in this Article 20 shall prevent a beneficiary providing labor, services or material for the **Work** from suing the **Contractor** for any amounts due and owing the beneficiary by the **Contractor**.

20.3.4 Every person who has furnished labor or material, to the **Contractor** or to a **Subcontractor** of the **Contractor**, in the prosecution of the **Work** and who has not been paid in full therefor before the expiration of a period of ninety (90) **Days** after the date on which the last of the labor was performed or material was furnished by him/her for which the claim is made, shall have the right to sue on this payment guarantee in his/her own name for the amount, or the balance thereof, unpaid at the time of commencement of the action; provided, however, that a person having a direct contractual relationship with a **Subcontractor** of the **Contractor** but no contractual relationship express or implied with the **Contractor** shall not have a right of action upon the guarantee unless he/she shall have given written notice to the **Contractor** within one hundred twenty (120) **Days** from the date on which the last of the labor was performed or the last of the material was furnished, for which his/her claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or for whom the labor was performed. The notice shall be served by delivering the same personally to the **Contractor** or by mailing the same by registered mail, postage prepaid, in an envelope addressed to the **Contractor** at any place where it maintains an office or conducts its business; provided, however, that where such notice is actually received by the **Contractor** by other means, such notice shall be deemed sufficient.

20.3.5 Except as provided in Labor Law Section 220-g, no action on this payment guarantee shall be commenced after the expiration of the one-year limitations period set forth in Section 137(4)(b) of the State Finance Law.

20.3.6 The **Contractor** shall promptly forward to the **City** any notice or demand received pursuant to Article 20.3.4. The **Contractor** shall inform the **City** of any defenses to the notice or demand and shall forward to the **City** any documents the **City** requests concerning the notice or demand.

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be

limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

20.3.8 The **City** shall make payment only if, after considering all defenses presented by the **Contractor**, it determines that the payment is due and owing to the beneficiary making the demand.

20.3.9 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorneys' fees, except to the extent required by State Finance Law Section 137.

20.3.10

20.4 Upon the receipt by the **City** of a demand pursuant to this Article 20, the **City** may withhold from any payment otherwise due and owing to the **Contractor** under this **Contract** an amount sufficient to satisfy the demand.

20.4.1 In the event the **City** determines that the demand is valid, the **City** shall notify the **Contractor** of such determination and the amount thereof and direct the **Contractor** to immediately pay such amount to the beneficiary. In the event the **Contractor**, within seven (7) **Days** of receipt of such notification from the **City**, fails to pay the beneficiary, such failure shall constitute an automatic and irrevocable assignment of payment by the **Contractor** to the beneficiary for the amount of the demand determined by the **City** to be valid. The **Contractor**, without further notification or other process, hereby gives its unconditional consent to such assignment of payment to the beneficiary and authorizes the **City**, on its behalf, to take all necessary actions to implement such assignment of payment, including without limitation the execution of any instrument or documentation necessary to effectuate such assignment.

20.4.2 In the event that the amount otherwise due and owing to the **Contractor** by the **City** is insufficient to satisfy such demand, the **City** may, at its option, require payment from the **Contractor** of an amount sufficient to cover such demand and exercise any other right to require or recover payment which the **City** may have under **Law** or **Contract**.

20.4.3 In the event the **City** determines that the demand is invalid, any amount withheld pending the **City**'s review of such demand shall be paid to the **Contractor**; provided, however, no lien has been filed. In the event a claim or an action has been filed, the terms and conditions set forth in Article 23 shall apply. In the event a lien has been filed, the parties will be governed by the provisions of the Lien Law of the State of New York.

20.5 The provisions of this Article 20 shall not prevent the **City** and the **Contractor** from resolving disputes in accordance with the **PPB** Rules, where applicable.

20.6 In the event the **City** determines that the beneficiary is entitled to payment pursuant to this Article 20, such determination and any defenses and counterclaims raised by the **Contractor** shall be taken into account in evaluating the **Contractor**'s performance.

20.7 Nothing in this Article 20 shall relieve the **Contractor** of the obligation to pay the claims of all

persons with valid and lawful claims against the **Contractor** relating to the **Work**.

20.8 The **Contractor** shall not require any performance, payment or other bonds of any **Subcontractor** if this **Contract** does not require such bonds of the **Contractor**.

20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or materials to the **Contractor** or its **Subcontractors** in the prosecution of the **Work** under this **Contract** all of the rights and remedies afforded to such persons by such section, including but not limited to, the right to commence an action against the **City** on the payment guarantee provided by this Article 20 within the one-year limitations period set forth in Section 137(4)(b).

ARTICLE 21. RETAINED PERCENTAGE

21.1 If this **Contract** requires one hundred (100%) percent performance and payment security, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.2 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded does not exceed one million (\$1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.3 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded exceeds one million (\$1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, up to ten (10%) percent of the value of **Work** certified for payment in each partial payment voucher. The percentage to be retained is set forth in Schedule A of the General Conditions.

ARTICLE 22. INSURANCE

22.1 Types of Insurance: The **Contractor** shall procure and maintain the following types of insurance if, and as indicated, in Schedule A of the General Conditions (with the minimum limits and special conditions specified in Schedule A). Such insurance shall be maintained from the date the **Contractor** is required to provide Proof of Insurance pursuant to Article 22.3.1 through the date of completion of all required **Work** (including punch list work as certified in writing by the **Resident Engineer**), except for insurance required pursuant to Article 22.1.4, which may terminate upon **Substantial Completion** of the **Contract**. All insurance shall meet the requirements set forth in this Article 22. Wherever this Article requires that insurance coverage be “at least as broad” as a specified form (including all ISO forms), there is no obligation that the form itself be used, provided that the **Contractor** can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance

Services Office (“ISO”) Form CG 0001. Such insurance shall be “occurrence” based rather than “claims-made” and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a “per project” aggregate limit, as specified in Schedule A, that applies separately to operations under this **Contract**.

22.1.1(a) Such Commercial General Liability Insurance shall name the **City** as an Additional Insured. Coverage for the City shall specifically include the **City’s** officials and employees, be at least as broad as the latest edition of ISO Form CG 20 10 and provide completed operations coverage at least as broad as the latest edition of ISO Form CG 20 37.

22.1.1(b) Such Commercial General Liability Insurance shall name all other entities designated as additional insureds in Schedule A but only for claims arising from the **Contractor’s** operations under this **Contract**, with coverage at least as broad as the latest edition of ISO Form CG 20 26.

22.1.1(c) If the **Work** requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits required by the Agency in accordance with Schedule A. If the **Work** does not require such a permit, the minimum limits shall be those provided for in Schedule A.

22.1.1(d) If any of the **Work** includes repair of a waterborne vessel owned by or to be delivered to the **City**, such Commercial General Liability shall include, or be endorsed to include, Ship Repairer’s Legal Liability Coverage to protect against, without limitation, liability arising from navigation of such vessels prior to delivery to and acceptance by the **City**.

22.1.2 Workers’ Compensation Insurance, Employers’ Liability Insurance, and Disability Benefits Insurance: The **Contractor** shall provide, and shall cause its **Subcontractors** to provide, Workers Compensation Insurance, Employers’ Liability Insurance, and Disability Benefits Insurance in accordance with the **Laws** of the State of New York on behalf of all employees providing services under this **Contract** (except for those employees, if any, for which the **Laws** require insurance only pursuant to Article 22.1.3).

22.1.3 United States Longshoremen’s and Harbor Workers Act and/or Jones Act Insurance: If specified in Schedule A of the General Conditions or if required by **Law**, the **Contractor** shall provide insurance in accordance with the United States Longshoremen’s and Harbor Workers Act and/or the Jones Act, on behalf of all qualifying employees providing services under this **Contract**.

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the

Work, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insured and a Loss Payee as its interest may appear.

22.1.4(a) Policies of such insurance shall specify that, in the event a loss occurs at an occupied facility, occupancy of such facility is permitted without the consent of the issuing insurance company.

22.1.4(b) Such insurance may be provided through an Installation Floater, at the **Contractor's** option, if it otherwise conforms with the requirements of this Article 22.1.4.

22.1.5 Commercial Automobile Liability Insurance: The **Contractor** shall provide Commercial Automobile Liability Insurance for liability arising out of ownership, maintenance or use of any owned (if any), non-owned and hired vehicles to be used in connection with this **Contract**. Coverage shall be at least as broad as the latest edition of ISO Form CA0001. If vehicles are used for transporting hazardous materials, the Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90.

22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) non-owned disposal sites.

22.1.6(a) Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees and be at least as broad as provided to the **Contractor** for this **Project**.

22.1.6(b) If such insurance is written on a claims-made policy, such policy shall have a retroactive date on or before the effective date of this **Contract**, and continuous coverage shall be maintained, or an extended discovery period exercised, for a period of not less than three (3) years from the time the **Work** under this **Contract** is completed.

22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this

Contract. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

22.1.7(b) Hull and Machinery Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Hull and Machinery Insurance with coverage for the **Contractor** or **Subcontractor** (whichever is doing this Work) and for the **City** (together with its officials and employees) as Additional Insured at least as broad as the latest edition of American Institute Tug Form for all tugs used under this **Contract** and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.

22.1.7(c) Marine Pollution Liability Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such Work to maintain, Marine Pollution Liability Insurance covering itself (or the Subcontractor doing such Work) as Named Insured and the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured. Coverage shall be at least as broad as that provided by the latest edition of Water Quality Insurance Syndicate Form and include, without limitation, liability arising from the discharge or substantial threat of a discharge of oil, or from the release or threatened release of a hazardous substance including injury to, or economic losses resulting from, the destruction of or damage to real property, personal property or natural resources.

22.1.8 The **Contractor** shall provide such other types of insurance, at such minimum limits and with such conditions, as are specified in Schedule A of the General Conditions.

22.2 General Requirements for Insurance Coverage and Policies:

22.2.1 All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A-/VII or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the **City** Corporation Counsel.

22.2.2 The **Contractor** shall be solely responsible for the payment of all premiums for all required policies and all deductibles and self-insured retentions to which such policies are subject, whether or not the **City** is an insured under the policy.

22.2.3 In his/her sole discretion, the **Commissioner** may, subject to the approval of the **Comptroller** and the **City** Corporation Counsel, accept Letters of Credit and/or custodial accounts in lieu of required insurance.

22.2.4 The **City's** limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the **Contractor** as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

22.2.5 The **Contractor** may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the **City**.

22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the **Contractor** shall file proof of insurance in accordance with this Article 22.3 within ten (10) **Days** of award. For insurance provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the **Commissioner** or ten (10) **Days** prior to the commencement of the portion of the **Work** covered by such policy, whichever is earlier.

22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the **Contractor** shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 - State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 - Certificate Of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. ACORD forms are not acceptable.

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the **City** and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

22.4 Operations of the **Contractor**:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the

Commissioner of a certificate does not excuse the **Contractor** from securing insurance consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the **Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor**'s own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor Insurance**: In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents

are to be sent to the **Commissioner's** address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** to the extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or **Law**.

ARTICLE 23. MONEY RETAINED AGAINST CLAIMS

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

- (a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever); or
- (b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or
- (c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract**,

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**,

or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller** shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

ARTICLE 24. MAINTENANCE AND GUARANTY

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** by authorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expiration of the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the

premises into which the equipment and materials have been installed.

CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM

ARTICLE 25. CHANGES

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included in the original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**. Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK

26.1 **Overrun of Unit Price Item**: An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1 For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty-five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of the item on the

basis of time and material records for the actual and reasonable cost as determined under Article 26.2, but in no event at a unit price exceeding the unit price bid.

26.2 **Extra Work:** For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

26.2.1 Necessary materials (including transportation to the **Site**); plus

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$. Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable), as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the **City** may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the **Site**, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation: $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$. In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

26.2.10 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work**, the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with Article 25.3.4, or for **Extra Work** ordered in connection with omitted **Work**, such method, subject to pre-audit by the **EAO**, may, at the option of the **Commissioner**, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the **Extra Work** is performed by a **Subcontractor**, the **Contractor** shall not be entitled to receive more than an additional allowance of five (5%) percent for overhead and profit over

the cost of such **Subcontractor's Work** as computed in accordance with Article 26.2.

ARTICLE 27. RESOLUTION OF DISPUTES

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB** Rules. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB** Rules, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

27.4 Presentation of Disputes to **Commissioner**.

Notice of Dispute and Agency Response. The **Contractor** shall present its dispute in writing ("Notice of Dispute") to the **Commissioner** within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the **Contract**. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the **Contractor** relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the **Contractor** in the dispute was arrived at. Within thirty (30) Days after receipt of the detailed written submission comprising the complete Notice of Dispute, the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** shall submit to the **Commissioner** all materials he or she deems pertinent to the dispute. Following initial submissions to the **Commissioner**, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the **Commissioner** whose decision shall be final. Willful failure of the **Contractor** to produce any requested material whose relevancy the **Contractor** has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the **Contractor** of its claim.

27.4.1 **Commissioner Inquiry.** The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner Determination.** Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO**, and **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 **Finality of Commissioner's Decision.** The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 **Presentation of Dispute to the Comptroller.** Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 **Time, Form, and Content of Notice.** Within thirty (30) **Days** of its receipt of a decision by the **Commissioner**, the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 Response. Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the **Comptroller** any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 **Comptroller** Investigation. The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 Opportunity of **Comptroller** to Compromise or Adjust Claim. The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**, within thirty (30) **Days** thereafter, may petition the Contract Dispute Resolution Board to review the

Commissioner's determination.

27.7.1 **Form and Content of Petition by Contractor.** The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner**, (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the **City** Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the **City** Corporation Counsel. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency Response.** Within thirty (30) **Days** of its receipt of the Petition by the **City** Corporation Counsel, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) **Days**.

27.7.3 **Further Proceedings.** The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the **City** Corporation Counsel, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 **Contract Dispute Resolution Board Determination.** Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 **Notification of Contract Dispute Resolution Board Decision.** The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the **City** Corporation Counsel, the CCPO, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB** Rules. The

Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of **Law**, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON A TIME & MATERIALS BASIS

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Work** on a time and material basis or **Extra Work** on a time and material basis ordered by the **Commissioner** under Article 25, or where the **Contractor** believes that it or any of its **Subcontractors** is performing **Extra Work** but a final determination by **Agency** has not been made, or the **Contractor** or any of its **Subcontractors** is performing disputed **Work** (whether on or off the **Site**), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the **Contractor** shall furnish the **Resident Engineer** daily with three (3) copies of written statements signed by the **Contractor's** representative at the **Site** showing:

28.1.1 The name, trade, and number of each worker employed on such **Work** or engaged in complying with such determination or order, the number of hours employed, and the character of the **Work** each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.

28.3 The **Contractor** and its **Subcontractors**, when required by the **Commissioner**, or the **Comptroller**, shall also produce for inspection, at the office of the **Contractor** or **Subcontractor**, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports, and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such **Work**, or in complying with such determination or order, and the amounts expended therefor, and shall permit the **Commissioner** and the

Comptroller to make such extracts therefrom, or copies thereof, as they or either of them may desire.

28.4 In connection with the examination provided for herein, the **Commissioner**, upon demand therefor, will produce for inspection by the **Contractor** such records as the **Agency** may have with respect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

ARTICLE 29. OMITTED WORK

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS

30.1 If the **Contractor** shall claim to be sustaining damages by reason of any act or omission of the **City** or its agents, it shall submit to the **Commissioner** within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter to the extent additional damages are being incurred for the same condition, verified statements of the details and the amounts of such damages, together with documentary evidence of such damages. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. Failure of the **Commissioner** to respond in writing to a written request for additional time within thirty (30) **Days** shall be deemed a denial of the request. On failure of the **Contractor** to strictly comply with

the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action or dispute resolution procedure arising under or by reason of this **Contract** shall not be different from or in excess of the statements and documentation made pursuant to this Article 30. This Article 30.1 does not apply to claims submitted to the **Commissioner** pursuant to Article 11 or to claims disputing a determination under Article 27.

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer, Architect or Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.4 Unless the information and examination required under Article 30.3 is provided by the **Contractor** and/or its **Subcontractor** upon thirty (30) **Days'** notice from the **Commissioner** or **Comptroller**, or upon the **Commissioner's** or **Comptroller's** written authorization to extend the time to comply, the **City** shall be released from all claims arising under, relating to or by reason of this **Contract**, except for sums certified by the **Commissioner** to be due under the provisions of this **Contract**. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the **City** to recover any sum in excess of the sums certified by the **Commissioner** to be due under or by reason of this **Contract**, the **Contractor** must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.

30.5 In addition, after the commencement of any action or dispute resolution procedure by the **Contractor** arising under or by reason of this **Contract**, the **City** shall have the right to require the **Contractor** to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolution procedure.

CHAPTER VII: POWERS OF THE RESIDENT ENGINEER, THE ENGINEER OR ARCHITECT AND THE COMMISSIONER

ARTICLE 31. THE RESIDENT ENGINEER

31.1 The **Resident Engineer** shall have the power to inspect, supervise, and control the performance

of the **Work**, subject to review by the **Commissioner**. The **Resident Engineer** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER

32.1 The **Engineer** or **Architect** or **Project Manager**, in addition to those matters elsewhere herein delegated to the **Engineer** and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the **Commissioner**:

32.1.1 To determine the amount, quality, and location of the **Work** to be paid for hereunder; and

32.1.2 To determine all questions in relation to the **Work**, to interpret the **Contract Drawings, Specifications, and Addenda**, and to resolve all patent inconsistencies or ambiguities therein; and

32.1.3 To determine how the **Work** of this **Contract** shall be coordinated with **Work** of **Other Contractors** engaged simultaneously on this **Project**, including the power to suspend any part of the **Work**, but not the whole thereof; and

32.1.4 To make minor changes in the **Work** as he/she deems necessary, provided such changes do not result in a net change in the cost to the **City** or to the **Contractor** of the **Work** to be done under the **Contract**; and

32.1.5 To amplify the **Contract Drawings**, add explanatory information and furnish additional **Specifications** and drawings, consistent with this **Contract**.

32.2 The foregoing enumeration shall not imply any limitation upon the power of the **Engineer** or **Architect** or **Project Manager**, for it is the intent of this **Contract** that all of the **Work** shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the **Engineer** or **Architect** or **Project Manager** is expressly called for herein.

32.3 The **Engineer** or **Architect** or **Project Manager** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

ARTICLE 33. THE COMMISSIONER

33.1 The **Commissioner**, in addition to those matters elsewhere herein expressly made subject to his/her determination, direction or approval, shall have the power:

33.1.1 To review and make determinations on any and all questions in relation to this **Contract** and its performance; and

33.1.2 To modify or change this **Contract** so as to require the performance of **Extra Work** (subject, however, to the limitations specified in Article 25) or the omission of **Contract Work**; and

33.1.3 To suspend the whole or any part of the **Work** whenever in his/her judgment such suspension is required:

33.1.3(a) In the interest of the **City** generally; or

33.1.3(b) To coordinate the **Work** of the various contractors engaged on this **Project** pursuant to the provisions of Article 12; or

33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

ARTICLE 34. NO ESTOPPEL

34.1 Neither the **City** nor any **Agency**, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this **Contract** by the **City**, the **Commissioner**, the **Engineer**, the **Resident Engineer**, or any other official, agent or employee of the **City**, either before or after the final completion and acceptance of the **Work** and payment therefor:

34.1.1 From showing the true and correct classification, amount, quality or character of the **Work** actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the **Work**, or any part thereof, does not in fact conform to the requirements of this **Contract**; and

34.1.2 From demanding and recovering from the **Contractor** any overpayment made to it, or such damages as the **City** may sustain by reason of the **Contractor's** failure to perform each and every part of its **Contract**.

CHAPTER VIII: LABOR PROVISIONS

ARTICLE 35. EMPLOYEES

35.1 The **Contractor** and its **Subcontractors** shall not employ on the **Work**:

35.1.1 Anyone who is not competent, faithful and skilled in the **Work** for which he/she shall be employed; and whenever the **Commissioner** shall inform the **Contractor**, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the **Work** forthwith, and shall not again be employed upon it; or

35.1.2 Any labor, materials or means whose employment, or utilization during the course of this **Contract**, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of **Work** or similar troubles by workers employed by the **Contractor** or its **Subcontractors**, or by any of the trades working in or about the buildings and premises where **Work** is being performed under this **Contract**, or by **Other Contractors** or their **Subcontractors** pursuant to other contracts, or on any other building or premises owned or operated by the **City**, its **Agencies**, departments, boards or authorities. Any violation by the **Contractor** of this requirement may, upon certification of the **Commissioner**, be considered as proper and sufficient cause for declaring the **Contractor** to be in default, and for the **City** to take action against it as set forth in Chapter X of this **Contract**, or such other article of this **Contract** as the Commissioner may deem proper; or

35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter “Labor Law”), the **Contractor** and its **Subcontractors** shall not employ on the **Work** any apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the **Contractor** as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the **Comptroller** of the **City** for the classification of **Work** actually performed. The **Contractor** or **Subcontractor** will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the **Contract Work**.

35.2 If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, all laborers, workers, and mechanics employed in the performance of the **Contract** on the public work site, either by the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by the **Contract**, shall be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor’s Occupational Safety and Health Administration that is at least ten (10) hours in duration.

35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,

35.3.1 The **Contractor** shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this **Contract** to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the **Comptroller**, or (c) the **CCPO**, **ACCO**, **Agency** head, or **Commissioner**.

35.3.2 If any of the **Contractor**’s officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the **Contractor** to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney’s fees.

35.3.3 The **Contractor** shall post a notice provided by the **City** in a prominent and accessible place on any site where work pursuant to the **Contract** is performed that contains information about:

35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and

35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the

reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.

35.3.4 For the purposes of this Article 35.3, “adverse personnel action” includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

35.3.5 This Article 35.3 is applicable to all of the **Contractor’s Subcontractors** having subcontracts with a value in excess of \$100,000; accordingly, the **Contractor** shall include this rider in all subcontracts with a value a value in excess of \$100,000.

35.4 Article 35.3 is not applicable to this **Contract** if it is valued at \$100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.

35.5 Paid Sick Leave Law.

35.5.1 Introduction and General Provisions.

35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law (“PSLL”), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time². Contractors of the **City** or of other governmental entities may be required to provide sick time pursuant to the PSLL.

35.5.1(b) The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City’s Department of Consumer Affairs (“DCA”); DCA’s rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York (“Rules”).

35.5.1(c) The **Contractor** agrees to comply in all respects with the PSLL and the Rules, and as amended, if applicable, in the performance of this **Contract**. The **Contractor** further acknowledges that such compliance is a material term of this **Contract** and that failure to comply with the PSLL in performance of this **Contract** may result in its termination.

35.5.1(d) The **Contractor** must notify the **Agency Chief Contracting Officer** of the **Agency** with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this **Contract**. Additionally, the **Contractor** must cooperate with DCA’s education efforts and must comply with DCA’s subpoenas and other document demands as set forth in the PSLL and Rules.

35.5.1(e) The PSLL is summarized below for the convenience of the **Contractor**. The **Contractor** is advised to review the PSLL and Rules in their entirety. On the

² Pursuant to the PSLL, if fewer than five employees work for the same employer, as determined pursuant to New York City Administrative Code § 20-912(g), such employer has the option of providing such employees uncompensated sick time.

website www.nyc.gov/PaidSickLeave there are links to the PSL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the **Contractor** can get more information about how to comply with the PSL. The **Contractor** acknowledges that it is responsible for compliance with the PSL notwithstanding any inconsistent language contained herein.

35.5.2 Pursuant to the PSL and the Rules: Applicability, Accrual, and Use.

35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its “calendar year” pursuant to the PSL (“Year”) must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee’s regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.

35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.

35.5.2(c) An employee entitled to sick time pursuant to the PSL may use sick time for any of the following:

- i. such employee’s mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee’s need for medical diagnosis or preventive medical care;
- ii. such employee’s care of a family member (an employee’s child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee’s spouse or domestic partner) who has a mental illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;
- iii. closure of such employee’s place of business by order of a public official due to a public health emergency; or
- iv. such employee’s need to care for a child whose school or childcare provider has been closed due to a public health emergency.

35.5.2(d) An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee’s use of sick time pursuant to the PSL must be treated by the

employer as confidential.

35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.

35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.

35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSLL does not apply to any of the following:

35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;

35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;

35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;

35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSLL for such employee;

35.5.3(e) an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines his or her own schedule, has the ability to reject or accept any assignment referred to him or her, and is paid an average hourly wage that is at least four times the federal minimum wage;

35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

35.5.3(g) an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or

35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.

35.5.4 Retaliation Prohibited. An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSLL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSLL.

35.5.5 Notice of Rights.

35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSLL. Such notice must be in English and the primary language spoken

by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at <http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml>.

35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.

35.5.6 Records. An employer must retain records documenting its compliance with the PSLL for a period of at least three years, and must allow DCA to access such records in furtherance of an investigation related to an alleged violation of the PSLL.

35.5.7 Enforcement and Penalties.

35.5.7(a) Upon receiving a complaint alleging a violation of the PSLL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within **30 Days** of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSLL has occurred, it has the right to issue a notice of violation to the employer.

35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSLL civil penalties not to exceed \$500 for a first violation, \$750 for a second violation within two years of the first violation, and \$1,000 for each succeeding violation within two years of the previous violation.

35.5.8 More Generous Policies and Other Legal Requirements. Nothing in the PSLL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract, collective bargaining agreement, employment benefit plan or other agreement providing more generous sick time. The PSLL provides minimum requirements pertaining to sick time and does not preempt, limit or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of sick leave or time, whether paid or unpaid, or that extends other protections to employees. The PSLL may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

35.6 HireNYC: Hiring and Reporting Requirements. This Article 35.6 applies to construction contracts of \$1,000,000 or more. The **Contractor** shall comply with the requirements of Articles 35.6.1-35.6.5 for all non-trades jobs (e.g., for an administrative position arising out of **Work** ant located in New York City). The **Contractor** shall reasonably cooperate with SBS and the **City** on specific outreach events, including "Hire-on-the-Spot" events, for the hiring of trades workers in connection with the **Work**. If provided elsewhere in this **Contract**, this **Contract** is subject to a project labor agreement.

35.6.1 Enrollment. The **Contractor** shall enroll with the HireNYC system, found at www.nyc.gov/sbs, within thirty (30) days after the registration of this **Contract** pursuant to Section 328 of the New York City Charter. The **Contractor** shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry

to mid-level job opportunities arising from this **Contract** and located in New York City, and, if so, the approximate start date of the first hire.

35.6.2 Job Posting Requirements.

35.6.2(a) Once enrolled in HireNYC, the **Contractor** agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this **Contract** and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of <https://labor.ny.gov/stats/2012-2022-NYS-Employment-Prospects.xls>). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the **Contract** and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the **Contractor's** representative charged with overseeing hiring. The **Contractor** must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

35.6.2(b) After enrollment through HireNYC and submission of relevant information, SBS will work with the **Contractor** to develop a recruitment plan which will outline the candidate screening process, and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the **Contractor** for interviews. The **Contractor** must interview referred applicants whom it believes are qualified.

35.6.2(c) After completing an interview of a candidate referred by HireNYC, the **Contractor** must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the **Contractor** shall provide the start date of new hires, and additional information reasonably related to such hires, within twenty (20) business days after the start date. In the event the **Contractor** does not have any job openings covered by this Rider in any given year, the **Contractor** shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the **Contract** pursuant to Charter section 328 and each anniversary date.

35.6.2(d) These requirements do not limit the **Contractor's** ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Article 35.6 shall be interpreted so as to require the **Contractor** to employ any particular worker.

35.6.2(e) In addition, the provisions of this Article 35.6 shall not apply to positions that the **Contractor** intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The **Contractor** shall not be required to report such openings with HireNYC. However, the **Contractor** shall enroll with the HireNYC system pursuant to Article 35.6.1, above, and, if such positions subsequently become open, then the remaining provisions of this Article 35.6 will apply.

35.6.3 Breach and Liquidated Damages. If the **Contractor** fails to comply with the terms of the **Contract** and this Article 35.6 (1) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the **Agency** may assess liquidated damages in the amount of two-thousand five hundred dollars (\$2,500) per breach. For all other events of noncompliance with the terms of this Article 35.6, the **Agency** may assess liquidated damages in the amount of five hundred dollars (\$500) per breach. Furthermore, in the event the **Contractor** breaches the requirements of this Article 35.6 during the term of the **Contract**, the **City** may hold the **Contractor** in default of this **Contract**.

35.6.4 Audit Compliance. In addition to the auditing requirements set forth in other parts of the **Contract**, the **Contractor** shall permit SBS and the **City** to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the **Contract** and located in New York City. The **Contractor** shall permit an inspection within seven (7) business days of the request.

35.6.5 Other Reporting Requirements. The **Contractor** shall report to the **City**, on a monthly basis, all information reasonably requested by the **City** that is necessary for the **City** to comply with any reporting requirements imposed by **Law**, including any requirement that the **City** maintain a publicly accessible database. In addition, the **Contractor** agrees to comply with all reporting requirements imposed by **Law**, or as otherwise requested by the **City**.

35.6.6 Federal Hiring Requirements. If this **Contract** is federally funded (as indicated elsewhere in this **Contract**), the **Contractor** shall comply with all federal hiring requirements as may be set forth in this **Contract**, including, as applicable: (a) Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing and Executive Order 11246, which prohibits discrimination in employment due to race, color, religion, sex or national origin, and requires the implementation of goals for minority and female participation for work involving any construction trade.

ARTICLE 36. NO DISCRIMINATION

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor**, **Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor**, **Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty (\$50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this

Contract; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon conviction thereof, be punished by a fine of not more than one hundred (\$100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) (“E.O. 50”), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner’s race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status,

disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the **City** Department of Business Services, Division of Labor Services (**DLS**) and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by **Law** or **Contract**.

ARTICLE 37. LABOR LAW REQUIREMENTS

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as

amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 Hours of **Work**: No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by

the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller**, where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the **City** for liquidated damages, which may be withheld from any amounts due on any contracts with the **City** of such party responsible, or may be recovered in actions brought by the **City** Corporation Counsel in the name of the **City**, in addition to damages for any other breach of this **Contract**, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this **Contract**. In addition, the **Commissioner** shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original **Contractor** shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the **Comptroller**, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the **Contractor** of the withholding or recovery of such sums by the **City**.

37.4.3 A determination by the **Comptroller** that a **Contractor** and/or its **Subcontractor** willfully violated Labor Law Section 220 will be forwarded to the **City's** five District Attorneys for review.

37.4.4 The **Contractor's** or **Subcontractor's** noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the **Comptroller** may also find and determine that the **Contractor** or **Subcontractor** willfully violated the New York Labor **Law**.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the **Contractor** is a non-responsible bidder on subsequent procurements with the **City** and thus a rejection of a future award

of a contract with the **City**, as well as any other sanctions provided for by **Law**.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a **Contractor** or **Subcontractor** within any consecutive six (6) year period determining that such **Contractor** or **Subcontractor** has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the **Contractor** or **Subcontractor** found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the **Contractor** or **Subcontractor** may be directed to make payment of a further sum as a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 Notices Posted At **Site**: Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation **Law** Section 51 notice, all other notices required by **Law** to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 Daily **Site** Sign-in Sheets: Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left

work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this Article 37.6.3, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site Laminated Identification Badges**: The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as a condition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 **Language Other Than English Used On Site**: Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 **Provision of Records**: The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller**, such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million (\$1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand (\$750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

ARTICLE 38. PAYROLL REPORTS

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performance of the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the **City**.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law**

Investigator(s), or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

ARTICLE 39. DUST HAZARDS

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

CHAPTER IX: PARTIAL AND FINAL PAYMENTS

ARTICLE 40. CONTRACT PRICE

40.1 The **City** shall pay, and the **Contractor** agrees to accept, in full consideration for the **Contractor's** performance of the **Work** subject to the terms and conditions hereof, the lump sum price or unit prices for which this **Contract** was awarded, plus the amount required to be paid for any **Extra Work** ordered by the **Commissioner** under Article 25, less credit for any **Work** omitted pursuant to Article 29.

ARTICLE 41. BID BREAKDOWN ON LUMP SUM

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

ARTICLE 42. PARTIAL PAYMENTS

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

ARTICLE 43. PROMPT PAYMENT

43.1 The Prompt Payment provisions of the **PPB** Rules in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB** Rules.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB** Rules.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5,

then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT

44.1 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City** Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A **Final Approved Punch List**.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 45. FINAL PAYMENT

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City** Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the **Commissioner's** approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer**

thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intended for ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant

to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the **City** Charter, as amended.

CHAPTER X: CONTRACTOR'S DEFAULT

ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT

48.1 In addition to those instances specifically referred to in other Articles herein, the **Commissioner** shall have the right to declare the **Contractor** in default of this **Contract** if:

48.1.1 The **Contractor** fails to commence **Work** when notified to do so by the **Commissioner**; or if

48.1.2 The **Contractor** shall abandon the **Work**; or if

48.1.3 The **Contractor** shall refuse to proceed with the **Work** when and as directed by the **Commissioner**; or if

48.1.4 The **Contractor** shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the **Commissioner**, to complete the **Work** in accordance with the progress schedule; or if

48.1.5 The **Contractor** shall fail or refuse to increase sufficiently such working force when ordered to do so by the **Commissioner**; or if

48.1.6 The **Contractor** shall sublet, assign, transfer, convert or otherwise dispose of this **Contract** other than as herein specified; or sell or assign a majority interest in the **Contractor**; or if

48.1.7 The **Contractor** fails to secure and maintain all required insurance; or if

48.1.8 A receiver or receivers are appointed to take charge of the **Contractor's** property or affairs; or if

48.1.9 The **Commissioner** shall be of the opinion that the **Contractor** is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the **Work**, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if

48.1.10 The **Commissioner** shall be of the opinion that the **Contractor** is or has been willfully or in bad faith violating any of the provisions of this **Contract**; or if

48.1.11 The **Commissioner** shall be of the opinion that the **Work** cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the

Commissioner's opinion, attributable to conditions within the **Contractor's** control; or if

48.1.12 The **Work** is not completed within the time herein provided therefor or within the time to which the **Contractor** may be entitled to have such completion extended; or if

48.1.13 Any statement or representation of the **Contractor** in the **Contract** or in any document submitted by the **Contractor** with respect to the **Work**, the **Project**, or the **Contract** (or for purposes of securing the **Contract**) was untrue or incorrect when made; or if

48.1.14 The **Contractor** or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the **PPB** Rules.

48.2 Before the **Commissioner** shall exercise his/her right to declare the **Contractor** in default, the **Commissioner** shall give the **Contractor** an opportunity to be heard, upon not less than two (2) **Days'** notice.

ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT

49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").

49.2 The **Commissioner's** determination that the **Contractor** is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the **Contractor** from commencing a plenary action for any damages relating to the **Contract**. If the **Contractor** protests the determination of the **Commissioner**, the **Contractor** may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

ARTICLE 50. QUITTING THE SITE

50.1 Upon receipt of such notice the **Contractor** shall immediately discontinue all further operations under this **Contract** and shall immediately quit the **Site**, leaving untouched all plant, materials, equipment, tools, and supplies then on the **Site**.

ARTICLE 51. COMPLETION OF THE WORK

51.1 The **Commissioner**, after declaring the **Contractor** in default, may then have the **Work** completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the **Contractor's** plant, materials, equipment, tools, and supplies remaining on the **Site**, and also such **Subcontractors**, as he/she may deem advisable.

51.2 After such completion, the **Commissioner** shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the **Contract**) from the date when the **Work** should have been completed by the **Contractor** in accordance with the terms hereof to the date of actual completion of the **Work**. Such certificate shall be binding and conclusive upon the **Contractor**, its sureties, and any person claiming under the **Contractor**, as to the amount thereof.

51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the **Commissioner**, and any liquidated damages assessed against the **Contractor**, shall be charged against and deducted out of monies which are earned by the **Contractor** prior to the date of default. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

ARTICLE 52. PARTIAL DEFAULT

52.1 In case the **Commissioner** shall declare the **Contractor** in default as to a part of the **Work** only, the **Contractor** shall discontinue such part, shall continue performing the remainder of the **Work** in strict conformity with the terms of this **Contract**, and shall in no way hinder or interfere with any **Other Contractor(s)** or persons whom the **Commissioner** may engage to complete the **Work** as to which the **Contractor** was declared in default.

52.2 The provisions of this Chapter relating to declaring the **Contractor** in default as to the entire **Work** shall be equally applicable to a declaration of partial default, except that the **Commissioner** shall be entitled to utilize for completion of the part of the **Work** as to which the **Contractor** was declared in default only such plant, materials, equipment, tools, and supplies as had been previously used by the **Contractor** on such part.

ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK

53.1 In completing the whole or any part of the **Work** under the provisions of this Chapter X, the **Commissioner** shall have the power to depart from or change or vary the terms and provisions of this **Contract**, provided, however, that such departure, change or variation is made for the purpose of reducing the time or expense of such completion. Such departure, change or variation, even to the extent of accepting a lesser or different performance, shall not affect the conclusiveness of the **Commissioner's** certificate of the cost of completion referred to in Article 51, nor shall it constitute a defense to an action to recover the amount by which such certificate exceeds the amount which would have been payable to the **Contractor** hereunder but for its default.

ARTICLE 54. OTHER REMEDIES

54.1 In addition to the right to declare the **Contractor** in default pursuant to this Chapter X, the **Commissioner** shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List**. A written notice of the exercise of this right shall be sent to the **Contractor** who shall immediately quit the **Site** in accordance with the provisions of Article 50.

54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by

the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under **Law** or in equity.

54.4 The exercise by the **City** of any remedy set forth herein shall not be deemed a waiver by the **City** of any other legal or equitable remedy contained in this **Contract** or provided under **Law**.

CHAPTER XI: MISCELLANEOUS PROVISIONS

ARTICLE 55. CONTRACTOR'S WARRANTIES

55.1 In consideration of, and to induce, the award of this **Contract** to the **Contractor**, the **Contractor** represents and warrants:

55.1.1 That it is financially solvent, sufficiently experienced and competent to perform the **Work**; and

55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and

55.1.3 That it has read and complied with all requirements set forth in the **Contract**.

ARTICLE 56. CLAIMS AND ACTIONS THEREON

56.1 Any claim, that is not subject to dispute resolution under the **PPB** Rules or this **Contract**, against the **City** for damages for breach of **Contract** shall not be made or asserted in any action, unless the **Contractor** shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.

56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:

56.2.1 Any claims arising out of events occurring after **Substantial Completion** and before **Final Acceptance** of the **Work** shall be asserted within six (6) months of **Final Acceptance** of the **Work**;

56.2.2 If the **Commissioner** exercises his/her right to complete or cause to complete any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List** pursuant to Article 54, any such action shall be commenced within six (6) months from the date the **Commissioner** notifies the **Contractor** in writing that he/she has exercised such right. Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

ARTICLE 57. INFRINGEMENT

57.1 The **Contractor** shall be solely responsible for and shall defend, indemnify, and hold the **City** harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the **City** may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the **Contractor** of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the **Contractor** and/or its **Subcontractors** in the performance or completion of the **Work**. Insofar as the facts or **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent permitted by **Law**.

ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the **Contractor** against any official, agent or employee of the **City** for, or on account of, anything done or omitted to be done in connection with this **Contract**.

ARTICLE 59. SERVICE OF NOTICES

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre-paid envelope.

59.2 **Contractor's** notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor**, and delivered to the **Commissioner**.

59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT

60.1 If this **Contract** contains any unlawful provision not an essential part of the **Contract** and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the **Contract** without affecting the binding force of the remainder.

ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED

61.1 It is the intent and understanding of the parties to this **Contract** that each and every provision of **Law** required to be inserted in this **Contract** shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this **Contract** shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the **Law** and without prejudice to the rights of either party hereunder.

ARTICLE 62. TAX EXEMPTION

62.1 The **City** is exempt from payment of Federal, State, and local taxes, including sales and compensating use taxes of the State of New York and its cities and counties on all tangible personal property sold to the **City** pursuant to the provisions of this **Contract**. These taxes are not to be included in bids. However, this exemption does not apply to tools, machinery, equipment or other property leased by or to the **Contractor**, **Subcontractor** or **Materialman** or to tangible personal property which, even though it is consumed, is not incorporated into the completed **Work** (consumable supplies) and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**. The **Contractor** and its **Subcontractors** and **Materialmen** shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**, that is required, necessary or proper for or incidental to the construction of the **Project** covered by this **Contract**. The sum paid under this **Contract** for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.

62.2.1 The **Contractor** agrees to construct the **Project** and to perform all **Work**, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such **Work**, labor, and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, and services, shall be in full consideration for the performance by the **Contractor** of all its duties and obligations under this **Contract** in connection with said **Work**, labor, and services.

62.3 20 NYCRR Section 541.3(d) provides that a **Contractor's** purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The **City** shall not pay sales tax for any such tangible personal property that it purchases from the **Contractor** pursuant to the **Contract**. With respect to such tangible personal property, the **Contractor**, at the request of the **City**, shall furnish to the **City** such bills of sale and other instruments as may be required by the **City**, properly executed, acknowledged and delivered assuring to the **City** title to such tangible personal property, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such tangible personal property as the property of the **City**.

62.4 Title to all tangible personal property to be sold by the **Contractor** to the **City** pursuant to the provisions of the **Contract** shall immediately vest in and become the sole property of the **City** upon delivery of such tangible personal property to the **Site**. Notwithstanding such transfer of title, the **Contractor** shall

have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this **Contract**, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the **City**, until such time as the **Work** covered by the **Contract** is fully accepted by the **City**. Such transfer of title shall in no way affect any of the **Contractor's** obligations hereunder. In the event that, after title has passed to the **City**, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work** from the **Work** and labor, services, and any other matters to be provided, and provided further that the subcontracts and purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and **Materialmen** shall furnish a **Contractor** Exempt Purchase Certificate to all persons, firms or corporations from which they purchase tangible personal property for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this Article 62 shall control.

ARTICLE 63. INVESTIGATION(S) CLAUSE

63.1 The parties to this **Contract** agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a **City** governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the **City**, or any public benefit corporation organized under the **Laws** of the State of New York, or;

63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a **City** or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is

seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision thereof or any local development corporation within the **City**, then;

63.4 The **Commissioner** whose **Agency** is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) **Days**' written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

63.5 If any non-governmental party to the hearing requests an adjournment, the **Commissioner** who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the **City** incurring any penalty or damages for delay or otherwise.

63.6 The penalties which may attach after a final determination by the **Commissioner** may include but shall not exceed:

63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the **City**; and/or

63.6.2 The cancellation or termination of any and all such existing **City** contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this **Contract**, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the **City** incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the **City**.

63.7 The **Commissioner** shall consider and address in reaching his/her determination and in assessing an appropriate penalty the factors in Articles 63.7.1 and 63.7.2. The **Commissioner** may also consider, if relevant and appropriate, the criteria established in Articles 63.7.3 and 63.7.4, in addition to any other information which may be relevant and appropriate:

63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

63.7.2 The relationship of the person who refused to testify to any entity that is a party to the hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the **City**.

63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Article 63.6, provided that the party

or entity has given actual notice to the **Commissioner** upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity shall present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

63.8 Definitions:

63.8.1 The term “license” or “permit” as used in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.

63.8.2 The term “person” as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

63.8.3 The term “entity” as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the **City** or otherwise transacts business with the **City**.

63.8.4 The term “member” as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.

63.9 In addition to and notwithstanding any other provision of this **Contract**, the **Commissioner** may in his/her sole discretion terminate this **Contract** upon not less than three (3) **Days**’ written notice in the event the **Contractor** fails to promptly report in writing to the **Commissioner** of the Department of Investigations (“DOI”) of the **City** any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the **City** or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this **Contract** by the **Contractor**, or affecting the performance of this **Contract**.

ARTICLE 64. TERMINATION BY THE CITY

64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, at any time, terminate this **Contract** by written notice to the **Contractor**. In the event of termination, the **Contractor** shall, upon receipt of such notice, unless otherwise directed by the **Commissioner**:

64.1.1 Stop **Work** on the date specified in the notice;

64.1.2 Take such action as may be necessary for the protection and preservation of the **City**’s materials and property;

64.1.3 Cancel all cancelable orders for material and equipment;

64.1.4 Assign to the **City** and deliver to the **Site** or another location designated by the **Commissioner**, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract** and not incorporated in the **Work**;

64.1.5 Take no action which will increase the amounts payable by the **City** under this
64.1.5 **Contract**.

64.2 In the event of termination by the **City** pursuant to this Article 64, payment to the **Contractor** shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.

64.2.1 Lump Sum Contracts or Items: On all lump sum **Contracts**, or on lump sum items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this **Contract**. On lump sum **Contracts** only, the **City** will also pay the **Contractor** an additional sum as provided in Article 64.2.1(c).

64.2.1(a) For **Work** completed prior to the notice of termination, the **Contractor** shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the **Work**, as determined by the **Commissioner**. For the purpose of determining the pro rata portion of the lump sum bid amount to which the **Contractor** is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The **Commissioner's** determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated in the **Work**, the **Contractor** shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum **Contracts**, the **Contractor** shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million (\$5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million (\$5,000,000) dollars and fifteen million (\$15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million (\$15,000,000) dollars.

64.2.1(d) In the event the **City** terminates a lump sum **Contract** pursuant to this Article 64 within ninety (90) **Days** after registration of the **Contract** with the **Comptroller**, the **Contractor** shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price **Contracts**, or on unit price items in a

Contract, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this **Contract**:

64.2.2(a) For all completed units, the unit price stated in the **Contract**, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the **Contract** based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).

64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all **Contracts** or items in a **Contract** where payment for the **Work** is based on time and material records, the **Contractor** shall be paid in accordance with Article 26, less all payments previously made pursuant to this **Contract**.

64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:

64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,

64.2.4(b) The actual cost of labor involved in construction and installation at the **Site**, and

64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this **Contract** less any amounts that have been or should be refunded by the **Contractor's** sureties or insurance carriers.

64.2.4(d) Direct Costs shall not include overhead.

64.3 In no event shall any payments under this Article 64 exceed the **Contract** price for such items.

64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the **Contractor** in full satisfaction of all claims against the **City**.

64.5 The **City** may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this **Contract** or by **Law** (including but not limited to liquidated damages) and any claims it may have against the **Contractor**. The **City's** exercise of the right to terminate the **Contract** pursuant to this Article 64 shall not impair or otherwise effect the **City's** right to assert any claims it may have against the **Contractor** in a plenary action.

64.6 Where the **Work** covered by the **Contract** has been substantially completed, as determined in writing by the **Commissioner**, termination of the **Work** shall be handled as an omission of **Work** pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the **Contract** sum, or if the amount is determined after final payment, such amount shall be paid by the **Contractor**.

ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE

65.1 This **Contract** shall be deemed to be executed in the **City** regardless of the domicile of the **Contractor**, and shall be governed by and construed in accordance with the **Laws** of the State of New York and the **Laws** of the United States, where applicable.

65.2 The parties agree that any and all claims asserted against the **City** arising under this **Contract** or related thereto shall be heard and determined in the courts of the State of New York (“New York State Courts”) located in the **City** and County of New York. To effect this **Contract** and intent, the **Contractor** agrees:

65.2.1 If the **City** initiates any action against the **Contractor** in Federal court or in a New York State Court, service of process may be made on the **Contractor** either in person, wherever such **Contractor** may be found, or by registered mail addressed to the **Contractor** at its address as set forth in this **Contract**, or to such other address as the **Contractor** may provide to the **City** in writing; and

65.2.2 With respect to any action between the **City** and the **Contractor** in a New York State Court, the **Contractor** hereby expressly waives and relinquishes any rights it might otherwise have:

65.2.2(a) To move to dismiss on grounds of forum non conveniens;

65.2.2(b) To remove to Federal Court; and

65.2.2(c) To move for a change of venue to a New York State Court outside New York County.

65.2.3 With respect to any action brought by the **City** against the **Contractor** in a Federal Court located in the **City**, the **Contractor** expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the **City**.

65.2.4 If the **Contractor** commences any action against the **City** in a court located other than in the **City** and County of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the **City** and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the **Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.

65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT

66.1 The **Contractor** agrees that neither the **Contractor** nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.

66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the **Contractor** or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the **Comptroller** may, at his/her option, render forfeit and void this **Contract**.

66.3 The **Contractor** shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the **Comptroller** thereunder.

ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM

67.1 This **Contract** is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the **City** Department of Business Services, if any portion of the **Contract** is subcontracted, not less than ten (10%) percent of the total dollar amount of the **Contract** shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the **Contract** is subcontracted, such lesser percentage shall be so awarded.

67.3 The **Contractor** shall not require performance and payment bonds from LBE **Subcontractors**.

67.4 If the **Contractor** has indicated prior to award that no **Work** will be subcontracted, no **Work** shall be subcontracted without the prior approval of the **Commissioner**, which shall be granted only if the **Contractor** makes a good faith effort beginning at least six (6) weeks before the **Work** is to be performed to obtain LBE **Subcontractors** to perform the **Work**.

67.5 If the **Contractor** has not identified sufficient LBE **Subcontractors** prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its **Contract**, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the **Contractor** shall begin to solicit LBE's to perform subcontracted **Work** at least six (6) weeks before the date such **Work** is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.

67.6 Failure of the **Contractor** to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this **Contract**. Remedy for such breach may include the imposition of any or all of the following sanctions:

67.6.1 Reducing the **Contractor's** compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;

67.6.2 Declaring the **Contractor** in default;

67.6.3 If the **Contractor** is an LBE, de-certifying and declaring the **Contractor** ineligible to participate in the LBE program for a period of up to three (3) years.

ARTICLE 68. ANTITRUST

68.1 The **Contractor** hereby assigns, sells, and transfers to the **City** all right, title, and interest in and to any claims and causes of action arising under the antitrust **Laws** of New York State or of the United States relating to the particular goods or services purchased or procured by the **City** under this **Contract**.

ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS

69.1 Notice To All Prospective **Contractors**:

69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local **Law** provides for certain restrictions on **City Contracts** to express the opposition of the people of the **City** to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.

69.1.2 Pursuant to Section 6-115.1, prospective **Contractors** for **Contracts** to provide goods or services involving an expenditure of an amount greater than ten thousand (\$10,000.) dollars, or for construction involving an amount greater than fifteen thousand (\$15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their **Contract**, that any business operations in Northern Ireland conducted by the **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.

69.1.3 Prospective **Contractors** are not required to agree to these conditions. However, in the case of **Contracts** let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a **Contract** to supply goods, services or construction of comparable quality, the **Agency** shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable **Law**, that it is in the best interest of the **City** that the **Contract** be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the **City** Charter.

69.1.4 In the case of **Contracts** let by other than competitive sealed bidding, if a prospective **Contractor** does not agree to these conditions, no **Agency**, elected official or the **City** Council shall award the **Contract** to that bidder unless the **Agency** seeking to use the goods, services or construction certifies in writing that the **Contract** is necessary for the **Agency** to perform its functions and there is no other responsible **Contractor** who will supply goods, services or construction of comparable quality at a comparable price.

69.2 In accordance with Section 6-115.1 of the Administrative Code, the **Contractor** stipulates that such **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** either:

69.2.1 Have no business operations in Northern Ireland, or

69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in

Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.

69.3 For purposes of this Article, the following terms shall have the following meanings:

69.3.1 “MacBride Principles” shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;

69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling to and from **Work**;

69.3.1(c) ban provocative religious or political emblems from the workplace;

69.3.1(d) publicly advertise all job openings and make special recruitment efforts to attract applicants from under-represented religious groups;

69.3.1(e) establish layoff, recall, and termination procedures which do not in practice favor a particular religious group;

69.3.1(f) abolish all job reservations, apprenticeship restrictions and different employment criteria which discriminate on the basis of religion;

69.3.1(g) develop training programs that will prepare substantial numbers of current employees from under-represented religious groups for skilled jobs, including the expansion of existing programs and the creation of new programs to train, upgrade, and improve the skills of workers from under-represented religious groups;

69.3.1(h) establish procedures to assess, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.

69.4 The **Contractor** agrees that the covenants and representations in Article 69.2 are material conditions to this **Contract**. In the event the **Agency** receives information that the **Contractor** who made the stipulation required by this Article 69 is in violation thereof, the **Agency** shall review such information and give the **Contractor** an opportunity to respond. If the **Agency** finds that a violation has occurred, the **Agency** shall have the right to declare the **Contractor** in default and/or terminate this **Contract** for cause and procure supplies, services or **Work** from another source in the manner the **Agency** deems proper. In the event of such termination, the **Contractor** shall pay to the **Agency**, or the **Agency** in its sole discretion may withhold from any amounts otherwise payable to the **Contractor**, the difference between the **Contract** price for the uncompleted portion of this **Contract** and the cost to the **Agency** of completing performance of this **Contract** either itself or by engaging another **Contractor** or **Contractors**. In the case of a requirement **Contract**, the **Contractor** shall be liable for such difference in price for the entire amount of supplies required by the **Agency** for the uncompleted term of **Contractor's Contract**. In the case of a construction **Contract**, the **Agency** shall also have the right to hold the **Contractor** in partial or total default in

accordance with the default provisions of this **Contract**, and/or may seek debarment or suspension of the **Contractor**. The rights and remedies of the **Agency** hereunder shall be in addition to, and not in lieu of, any rights and remedies the **Agency** has pursuant to this **Contract** or by operation of **Law**.

ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

70.1 The **Contractor** shall electronically file all alteration type-2 and alteration type-3 applications via the New York City Development Hub Web site, except applications for the following types of minor alterations: enlargements, curb cuts, legalizations, fire alarms, builders pavement plans, and jobs filed on Landmark Preservation Commission calendared properties. All such filings must be professionally certified. Information about electronic filing via the New York City Development Hub is available on the **City** Department of Buildings Web site at www.nyc.gov/buildings.

ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

71.1 Tropical hardwoods, as defined in Section 165 of the New York State Finance Law (Finance Law), shall not be utilized in the performance of this **Contract** except as expressly permitted by Section 165 of the Finance Law.

ARTICLE 72. CONFLICTS OF INTEREST

72.1 Section 2604 of the **City** Charter and other related provisions of the **City** Charter, the Administrative Code, and the Penal Law are applicable under the terms of this **Contract** in relation to conflicts of interest and shall be extended to **Subcontractors** authorized to perform **Work**, labor and services pursuant to this **Contract** and further, it shall be the duty and responsibility of the **Contractor** to so inform its respective **Subcontractors**. Notice is hereby given that, under certain circumstances, penalties may be invoked against the donor as well as the recipient of any form of valuable gift.

ARTICLE 73. MERGER CLAUSE

73.1 The written **Contract** herein, contains all the terms and conditions agreed upon by the parties hereto, and no other agreement, oral or otherwise, regarding the subject matter of this **Contract** shall be deemed to exist or to bind any of the parties hereto, or to vary any of the terms contained herein.

ARTICLE 74. STATEMENT OF WORK

74.1 The **Contractor** shall furnish all labor and materials and perform all **Work** in strict accordance with the **Specifications** and **Addenda** thereto, numbered as shown in Schedule A.

ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR

75.1 The **City** will pay and the **Contractor** will accept in full consideration for the performance of the **Contract**, subject to additions and deductions as provided herein, the total sum shown in Schedule A, this said sum being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof, based upon the **Contractor's** bid for the **Contract**.

ARTICLE 76. ELECTRONIC FUNDS TRANSFER

76.1 In accordance with Section 6-107.1 of the Administrative Code, the **Contractor** agrees to accept payments under this **Contract** from the **City** by electronic funds transfer (EFT). An EFT is any transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this **Contract**, the **Contractor** shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the **City** Department of Finance with information necessary for the **Contractor** to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the **Contractor** shall constitute full satisfaction by the **City** for the amount of the payment under this **Contract**. The account information supplied by the **Contractor** to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by **Law**.

76.2 The **Commissioner** may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the **City** Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the **Agency** may waive the requirements of this Article 76 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the **City**.

ARTICLE 77. RECORDS RETENTION

77.1 The **Contractor** agrees to retain all books, records, and other documents relevant to this **Contract** for six years after the final payment or termination of this **Contract**, whichever is later. **City**, state, and federal auditors and any other persons duly authorized by the **City** shall have full access to and the right to examine any such books, records, and other documents during the retention period.

ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS

78.1 Pre-Bidding (Investigation) Viewing of Site – Bidders must carefully view and examine the **Site** of the proposed **Work**, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions and hazards on, about or above the **Site** relating to or affecting in any way the performance of the **Work** to be done under the **Contract** that were or should have been known by a reasonably prudent bidder. To arrange a date for visiting the **Site**,

bidders are to contact the **Agency** contact person specified in the bid documents.

78.2 Should the **Contractor** encounter during the progress of the Work site conditions or environmental hazards at the **Site** materially differing from any shown on the **Contract Drawings** or indicated in the **Specifications** or such conditions or environmental hazards as could not reasonably have been anticipated by the **Contractor**, which conditions or hazards will materially affect the cost of the **Work** to be done under the **Contract**, the attention of the **Commissioner** must be called immediately to such conditions or hazards before they are disturbed. The **Commissioner** shall thereupon promptly investigate the conditions or hazards. If the **Commissioner** finds that they do so materially differ, and that they could not have been reasonably anticipated by the **Contractor**, the **Contract** may be modified with the **Commissioner's** written approval.

ARTICLE 79. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

ARTICLE I. M/WBE PROGRAM

Section 6-129 of the Administrative Code of the City of New York ("Section 6-129") establishes the program for participation in City procurement ("M/WBE Program") by minority- owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6- 129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan") and are detailed below.

The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129.

References to MBEs or WBEs shall also include such businesses certified pursuant to the executive law where credit is required by section 311 of the New York City Charter or other provision of law.

Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts.

Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A: PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS

1. The MBE and/or WBE Participation Goals established for this Contract or Task Orders issued pursuant to this Contract, ("Participation Goals"), as applicable, are set forth on Schedule B, Part 1 to this Contract (see Page 1, Line 1 Total Participation Goals) or will be set forth on Schedule B, Part 1 to Task Orders issued pursuant to this Contract, as applicable.

The Participation Goals represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with DSBS as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If Participation Goals have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the Participation Goals, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If Participation Goals have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant Participation Goal, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant Participation Goal. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If Participation Goals have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part 2 (see Pages 1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE Participation Goals, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part 2 (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the Participation Goals that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed non-responsive.

(ii) Participation Goals on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If Participation Goals have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part 2 (see Pages 1-2) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. The contractor must engage in good faith efforts to meet the Participation Goals as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART 2). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART 3). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multi- year contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the Participation Goals. Such certification must occur prior to the firms' commencement of work. A list of city-certified MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6451, or by visiting or writing DSBS at One Liberty Plaza ., New York, New York, 10006, 11th floor. Eligible firms that have not yet

been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

7. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to, the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's M/WBE Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its M/WBE Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.

9. Where an M/WBE Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or \$500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the Participation Goals should be modified.

10. Pre-award waiver of the Participation Goals. (a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the Participation Goals in accordance with Section 6-129, which requests that Agency change one or more Participation Goals on the grounds that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.

(b) To apply for a full or partial waiver of the Participation Goals, a bidder, proposer, or contractor, as applicable, must complete Part 3 of Schedule B and **submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing by email at MWBEModification@ddc.nyc.gov. Full or partial waiver requests that are received later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due may be rejected as untimely.** Bidders, proposers, or contractors, as applicable, who have submitted timely requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

(d) Agency may grant a full or partial waiver of the Participation Goals to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited

to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the Participation Goals. In making such determination, Agency may consider whether the M/WBE Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

11. Modification of M/WBE Utilization Plan. (a) A Contractor may request a modification of its M/WBE Utilization Plan after award of this Contract. PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission. The Agency may grant a request for Modification of a Contractor's M/WBE Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the Participation Goals. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the M/WBE Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;
- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

Agency's M/WBE officer shall provide written notice to the Contractor of the determination.

(b) The Agency may modify the Participation Goals when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its M/WBE Utilization Plan would be awarded to subcontractors.

12. If the Contractor was required to identify in its bid or proposal the MBEs and/or WBEs they intended to use in connection with the performance of the Contract or Task Order, substitutions to the identified firms may only be made with the approval of the Agency, which shall only be given when the Contractor has proposed to use a firm that would satisfy the Participation Goals to the same extent as the firm previously identified, unless the Agency determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts. In making such determination, the Agency shall require evidence of the

efforts listed in Section 11(a) above, as applicable, along with any other relevant factors.

13. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an M/WBE Utilization Plan and has committed to subcontract work to MBEs and/or WBEs in order to meet the Participation Goals, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

14. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

15. If Participation Goals have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B: MISCELLANEOUS

The Contractor shall take notice that, if this solicitation requires the establishment of a M/WBE Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the M/WBE Utilization Plan.

1. Pursuant to DSBS rules, construction contracts that include a requirement for a M/WBE Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

2. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.

3. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

4. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required Participation Goals.

ARTICLE II. ENFORCEMENT

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129

or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any M/WBE Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any M/WBE Utilization Plan, Agency may determine that one of the following actions should be taken:

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.

4. If an M/WBE Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its Participation Goals contained in its M/WBE Utilization Plan or the Participation Goals as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the Participation Goals and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the Participation Goals, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

7. The Contractor's record in implementing its M/WBE Utilization Plan shall be a factor in the evaluation of

its performance. Whenever Agency determines that a Contractor's compliance with an M/WBE Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in PASSPort as caution data.

CONTRACT SIGNATURE PAGE

This Contract is entered by and between the City of New York (“City”), acting by and through the **DEPARTMENT OF DESIGN AND CONSTRUCTION**, and **A.L.A.C. CONTRACTING CORP.** (“Contractor”).


This Contract consists of this contract signature page as well as the following documents (“Contract Documents”) which are located in the Documents tab of the PASSPort record titled **85023B0030-HBPED800Q**.

1. (Question answer) - ALAC Bid Bond Signed.pdf - Apr 24 2023 1:13PM
2. (Question answer) - ALAC Contracting HBPED800Q - Bid Schedule JB Specialty Items - 2023.01.18.xlsx - Apr 24 2023 1:13PM
3. (Question answer) - QUALIFICATION_FORM.pdf - Apr 24 2023 1:13PM
4. A.L.A.C. Contracting Corp. - HBPED800Q Schedule B - Apr 24 2023 1:29PM
5. Auto Liability Insurance - May 15 2023 8:59PM
6. Bidder #2 ALAC_Contracting_HBPED800Q - Bid_Schedule_02-07-2023_R_4_ - Apr 24 2023 1:29PM
7. Broker's Certification - May 15 2023 8:38PM
8. Disability Insurance - May 15 2023 2:17PM
9. General Liability Insurance - May 15 2023 8:57PM
10. HBPED800Q - CONTRACT DRAWINGS PART 1 OF 2 - Apr 24 2023 1:13PM
11. HBPED800Q - CONTRACT DRAWINGS PART 2 OF 2 - Apr 24 2023 1:13PM
12. HBPED800Q - Volume 2 - Apr 24 2023 1:13PM
13. HBPED800Q - Volume 3 [Addendum 6] - Apr 24 2023 1:13PM
14. HBPED800Q Addendum 1 - Apr 24 2023 1:13PM
15. HBPED800Q Addendum 2 - Apr 24 2023 1:13PM
16. HBPED800Q Addendum 4 - Apr 24 2023 1:13PM
17. HBPED800Q Addendum 5 - Apr 24 2023 1:13PM
18. HBPED800Q Addendum 6 - Apr 24 2023 1:13PM
19. NOTICE TO BIDDERS - COVID 19R4 - Apr 24 2023 1:13PM
20. Payment Bond - May 15 2023 8:54PM
21. Performance Bond - May 15 2023 8:55PM
22. Planholders list [Addendum 1] - Apr 24 2023 1:13PM
23. Proposal/Bid - Apr 24 2023 1:13PM
24. Volume 1 - Apr 24 2023 1:13PM
25. Worker's Compensation - May 15 2023 8:04PM

The above order does not represent an order of precedence. The Contract shall be governed by the order of precedence, if any, in the Contract Documents or by ordinary contract principles if no such order of precedence exists.

Each party is signing this Contract electronically on the date stated in that party's electronic signature.

The City of New York
By: **DEPARTMENT OF DESIGN AND CONSTRUCTION**

DocuSigned By:

1A87/ABA0188B41C...
(Signature)

Name: ERIC MACFARLANE

Title: First Deputy Commissioner

Date: 5/19/2023 | 18:38:06 PDT

Contractor

By: **A.L.A.C. CONTRACTING CORP.**

DocuSigned by:

Anthony Labriola

A0CCA3C66E8647C...

(Signature)

Name: Anthony Labriola

Title: Vice President

Date: 5/19/2023 | 16:43:31 PDT

PERFORMANCE BOND #1

Performance Bond #1 (4 Pages): Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration (“SBA”)for participation in its Bond Guarantee Program.

PERFORMANCE BOND #1 (Page 1)

KNOW ALL PERSONS BY THESE PRESENTS;

That we, _____

hereinafter referred to as the “Principal,”
and, _____

hereinafter referred to as the “Surety” (“Sureties”) are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the “City” or to its successors and assigns in the penal sum of _____

(\$ _____) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full; **NOW, THEREFORE**, the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal’s default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal’s default of the Contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

PERFORMANCE BOND #1 (Page 2)

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that the City has determined that the Principal is in default of the Contract, to (1) pay the City the cost to complete the contract as determined by the City in excess of the balance of the Contract held by the City, plus any damages or costs to which the City is entitled, up to the full amount of the above penal sum, (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof, or (3) tender a completion Contractor that is acceptable to the City. The Surety (Sureties) further agrees, at its option, either to notify the City that it elects to pay the city the cost of completion plus any applicable damages and costs under option (1) above, or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and, if the Surety elects to fully perform and complete the Work, then to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. If the Surety elects to tender payment pursuant to (1) above, then the Surety shall tender such amount within fifteen (15) business days notification from the City of the cost of completion. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and complete all Work as provided herein, or to tender a completion contractor.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, and waivers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to subcontractors shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal. Notwithstanding the above, if the City makes payments to the Principal before the time required by the contract that in the aggregate exceed \$100,000 or 10% of the Contract price, whichever is less, and that have not become earned prior to the Principal being found to be in default, then all payments made to the Principal before the time required by the Contract shall be added to the remaining contract value available to be paid for the completion of the Contract as if such sums had not been paid to the Principal, but shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and to complete all Work as provided herein, or to tender a completion contractor.

PERFORMANCE BOND #1 (Page 3)

IN WITNESS WHEREOF, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

_____ day of _____, 20_____(Seal)

_____(L.S.)
Principal

(Seal)

By: _____
Surety

(Seal)

By: _____
Surety

(Seal)

By: _____
Surety

(Seal)

By: _____
Surety

(Seal)

By: _____
Surety

By: _____

Bond Premium Rate _____

Bond Premium Cost _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he/she resides at _____; that he/she is the _____ of the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he/she resides at _____ partner of _____, a limited/general partnership existing under the laws of the State of _____, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he/she resides at _____, and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

Affix Acknowledgments and Justification of Sureties.

PERFORMANCE BOND #2

Performance Bond #2 (4 pages): Use if the total contract price is more than \$5 Million.

Bond No. 47-SUR-300104-01-0016

PERFORMANCE BOND #2 (Page 1)

PERFORMANCE BOND #2KNOW ALL PERSONS BY THESE PRESENTS,;

That we, A.L.A.C. Contracting Corp.

420 Falmouth Road, West Babylon, NY 11704

hereinafter referred to as the "Principal,"
and, Berkshire Hathaway Specialty Insurance Company

1314 Douglas Street, Suite 1400, Omaha, NE 68102

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of Twenty Six Million Two Hundred Twenty Six Thousand Two Hundred Twenty Six and 26/100--

(\$ 26,226,226.26--) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

Project ID: HBPED800Q; Reconstruction of Tide Gate Bridge - Borough of Queens

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making

good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal's default of the Contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

PERFORMANCE BOND #2 (Page 2)

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that the City has determined that the Principal is in default of the Contract, to either (1) pay the full amount of the above penal sum in complete discharge and exoneration of this bond and of all the liabilities of the Surety relating to this bond, or (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof. The Surety (Sureties) further agrees, at its option, either to tender the penal sum or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to commence and to complete all Work as provided herein.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any Work to be performed or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

PERFORMANCE BOND #2 (Page 3)

IN WITNESS WHEREOF, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

24th day of April 2023
(Seal)

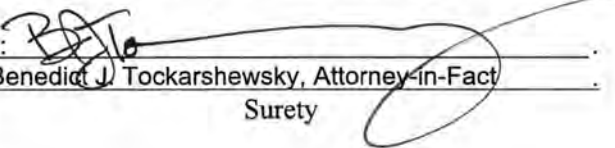
A.L.A.C. Contracting Corp. (L.S.)
Principal

(Seal)

By:



Surety
Berkshire Hathaway Specialty Insurance Company

By: 
Benedict J. Tockarszewsky, Attorney-in-Fact
Surety

(Seal)

By: _____
Surety

(Seal)

By: _____
Surety

(Seal)

By: _____
Surety

(Seal)

By: _____

Bond Premium Rate \$10.00/Thousand

Bond Premium Cost \$326,517.00

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of New York County of Suffolk ss:

On this 27th day of April, 2023 before me personally came Anthony Labriola,

to me known, who, being by me duly sworn did depose and say that he resides at 10 Hicks Circle Hicksville NY 11801; that he/she is the Vice President of the corporation described in and which executed the foregoing instrument; that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

Roseann Antonacci
Notary Public or Commissioner of Deeds.

ROSEANN ANTONACCI
NOTARY PUBLIC - STATE OF NEW YORK
Registration # 01AN6285226
Commission Expires 07/01/2025

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of _____ County of _____ ss:

On this _____ day of _____, 20____ before me personally came _____,

to me known, who, being by me duly sworn did depose and say that he/she resides at _____; that he/she is _____ partner of _____, a limited/general partnership existing under the laws of the State of _____, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of _____ County of _____ ss:

On this _____ day of _____, 20____ before me personally came _____,

to me known, who, being by me duly sworn did depose and say that he/she resides at _____, and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

Affix Acknowledgments and Justification of Sureties.

Surety Acknowledgment

State of New York

County of Westchester County

On the 24th day of April, 2023 personally came Benedict J. Tockarshewsky to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Berkshire Hathaway Specialty Insurance Company in and which executed the above Instrument know(s) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

TINA CASTIELLO
NOTARY PUBLIC - STATE OF NEW YORK
NO. 01CA6191205
QUALIFIED IN WESTCHESTER COUNTY
MY COMMISSION EXPIRES AUGUST 04, 2024

My commission expires _____



Notary Public

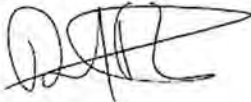
Power Of Attorney

**BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY
NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY**

Know all men by these presents, that **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, **NATIONAL INDEMNITY COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: **Benedict J. Tockarshewsky, Marnie Ginsburg, William D. Haas, 333 Westchester Avenue, Southwest Building, Suite 102 of the city of White Plains, State of New York**, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. **This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.**

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of December 20, 2018. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively. **The following signature by an authorized officer of the Company may be a facsimile, which shall be deemed the equivalent of and constitute the written signature of such officer of the Company for all purposes regarding this Power of Attorney, including satisfaction of any signature requirements on any and all undertakings, bonds, or other such writings obligatory in the nature thereof, to which this Power of Attorney applies.**

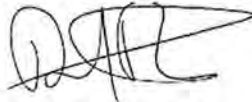
BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY,



By: _____
David Fields, Executive Vice President



**NATIONAL INDEMNITY COMPANY,
NATIONAL LIABILITY & FIRE INSURANCE COMPANY,**



By: _____
David Fields, Vice President

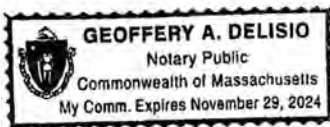
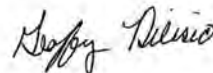


NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 20th day of December, 2018, before me appeared David Fields, Executive Vice President of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY** and Vice President of **NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]

Notary Public

I, Ralph Tortorella, the undersigned, Officer of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, see hereunto affixed the seals of said Companies this April 24, 2023.




Officer

To verify the authenticity of this Power of Attorney please contact us at: BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, One Lincoln Street, 23rd Floor Boston, MA 02111 | (770) 625-2516 or by email at jennifer.dortier@bhspecialty.com THIS POWER OF ATTORNEY IS VOID IF ALTERED
To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claimsnotice@bhspecialty.com, via fax to (617) 507-8259, or via mail.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102-1944

ADMITTED ASSETS *

	<u>12/31/2022</u>	<u>12/31/2021</u>	<u>12/31/2020</u>
Total invested assets	\$ 5,680,246,430	\$ 6,504,184,299	\$ 5,475,240,588
Premium & agent balances (n	582,469,494	552,510,359	603,615,506
All other assets	217,334,073	142,765,038	157,897,676
Admitted Assets	<u>\$ 6,480,049,997</u>	<u>\$ 7,199,459,696</u>	<u>\$ 6,236,753,770</u>

LIABILITIES & SURPLUS *

	<u>12/31/2022</u>	<u>12/31/2021</u>	<u>12/31/2020</u>
Loss & loss exp. unpaid	\$ 1,495,870,171	\$ 1,142,116,028	\$ 921,923,948
Unearned premiums	536,797,683	484,660,143	372,836,160
All other liabilities	1,065,221,844	1,163,007,684	1,054,922,210
Total Liabilities	<u>3,097,889,698</u>	<u>2,789,783,855</u>	<u>2,349,682,318</u>
Total Policyholders' Surplus	<u>3,382,160,299</u>	<u>4,409,675,842</u>	<u>3,887,071,452</u>
Total Liabilities & Surplus	<u>\$ 6,480,049,997</u>	<u>\$ 7,199,459,697</u>	<u>\$ 6,236,753,770</u>

* Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.

PAYMENT BOND

Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 1)

Bond No. 47-SUR-300104-01-0016

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, _____

A.L.A.C. Contracting Corp.

420 Falmouth Road, West Babylon, NY 11704

hereinafter referred to as the "Principal", and _____

Berkshire Hathaway Specialty Insurance Company

1314 Douglas Street, Suite 1400, Omaha, NE 68102

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns, in the penal sum of

Twenty Six Million Two Hundred Twenty Six Thousand Two Hundred Twenty Six and 26/100--

(\$26,226,226.26)-Dollars, lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

Project ID: HBPED800Q; Reconstruction of Tide Gate Bridge - Borough of Queens

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for

(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site of the Project regardless of any contractual relationship between the Principal or such Subcontractors, or his or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the project; and

PAYMENT BOND (Page 2)

(b) Materials and supplies (whether incorporated in the permanent structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain in full force and effect.

This bond is subject to the following additional conditions, limitations and agreements:

(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the City itself.

(b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two years after the complete performance of said Contract and final settlement thereof.

The Principal, for himself and his successors and assigns, and the Surety (Sureties), for itself and its successors and assigns, do hereby expressly waive any objection that might be interposed as to the right of the City to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either of them might interpose to an action brought hereon by any person, firm or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed rendered, or furnished as aforesaid upon the ground that there is no law authorizing the City to require the foregoing provisions to be placed in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.

PAYMENT BOND (Page 3)

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this 24th day of April, 2023.

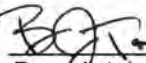
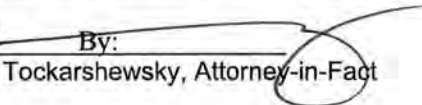
(Seal)

A.L.A.C. Contracting Corp. (L.S.) Principal

By: 

(Seal)

Berkshire Hathaway Specialty Insurance Company Surety

 By: 
Benedict J. Tockarszewsky, Attorney-in-Fact

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Suffolk ss:

On this 27th day of April, 2023, before me personally came Anthony Labriola to me known, who, being by me duly sworn did depose and say that he resides at 10 Hicks Circle Hicksville NY 11801 that he is the Vice President of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

ROSEANN ANTONACCI
NOTARY PUBLIC - STATE OF NEW YORK
Registration # 01AN6285226
Commission Expires 07/01/2025

Roseann Antonacci
Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____ County of _____ ss:

On this _____ day of _____, _____, before me personally appeared _____ to me known, and known to me to be one of the members of the firm of _____ described in and who executed the foregoing instrument; and he acknowledged to me that he executed the same as and for the act and deed of said firm.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:

On this _____ day of _____, _____, before me personally appeared _____ to me known, and known to me to be the person described in and who executed the foregoing instrument; and acknowledged that he executed the same.

Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

Affix Acknowledgments and Justification of Sureties.

Surety Acknowledgment

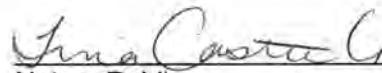
State of **New York**

County of **Westchester County**

On the 24th day of **April, 2023** personally came **Benedict J. Tockarszewsky** to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of **Berkshire Hathaway Specialty Insurance Company** in and which executed the above Instrument know(s) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

TINA CASTIELLO
NOTARY PUBLIC - STATE OF NEW YORK
NO. 01CA6191205
QUALIFIED IN WESTCHESTER COUNTY
MY COMMISSION EXPIRES AUGUST 04, 2024

My commission expires _____



Notary Public

Power Of Attorney

**BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY
NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY**

Know all men by these presents, that **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, **NATIONAL INDEMNITY COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: **Benedict J. Tockarszewsky, Marnie Ginsburg, William D. Haas, 333 Westchester Avenue, Southwest Building, Suite 102 of the city of White Plains, State of New York**, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. **This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.**

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of December 20, 2018. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively. **The following signature by an authorized officer of the Company may be a facsimile, which shall be deemed the equivalent of and constitute the written signature of such officer of the Company for all purposes regarding this Power of Attorney, including satisfaction of any signature requirements on any and all undertakings, bonds, or other such writings obligatory in the nature thereof, to which this Power of Attorney applies.**

**BERKSHIRE HATHAWAY SPECIALTY
INSURANCE COMPANY,**

By: _____
David Fields, Executive Vice President



**NATIONAL INDEMNITY COMPANY,
NATIONAL LIABILITY & FIRE INSURANCE COMPANY,**

By: _____
David Fields, Vice President

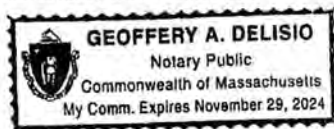


NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 20th day of December, 2018, before me appeared David Fields, Executive Vice President of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY** and Vice President of **NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



Notary Public

I, Ralph Tortorella, the undersigned, Officer of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. **IN TESTIMONY WHEREOF**, see hereunto affixed the seals of said Companies this **April 24, 2023**.



Officer

To verify the authenticity of this Power of Attorney please contact us at: BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, One Lincoln Street, 23rd Floor Boston, MA 02111 | (770) 625-2516 or by email at Jemifer.Pozner@bhspecialty.com. **THIS POWER OF ATTORNEY IS VOID IF ALTERED**
To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claimnotice@bhspecialty.com, via fax to (617) 507-8259, or via mail.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102-1944

ADMITTED ASSETS*

	<u>12/31/2022</u>	<u>12/31/2021</u>	<u>12/31/2020</u>
Total invested assets	\$ 5,680,246,430	\$ 6,504,184,299	\$ 5,475,240,588
Premium & agent balances (n	582,469,494	552,510,359	603,615,506
All other assets	217,334,073	142,765,038	157,897,676
Admitted Assets	<u>\$ 6,480,049,997</u>	<u>\$ 7,199,459,696</u>	<u>\$ 6,236,753,770</u>

LIABILITIES & SURPLUS*

	<u>12/31/2022</u>	<u>12/31/2021</u>	<u>12/31/2020</u>
Loss & loss exp. unpaid	\$ 1,495,870,171	\$ 1,142,116,028	\$ 921,923,948
Unearned premiums	536,797,683	484,660,143	372,836,160
All other liabilities	1,065,221,844	1,163,007,684	1,054,922,210
Total Liabilities	<u>3,097,889,698</u>	<u>2,789,783,855</u>	<u>2,349,682,318</u>
Total Policyholders' Surplu:	<u>3,382,160,299</u>	<u>4,409,675,842</u>	<u>3,887,071,452</u>
Total Liabilities & Surplus	<u>\$ 6,480,049,997</u>	<u>\$ 7,199,459,697</u>	<u>\$ 6,236,753,770</u>

* Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/10/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Ins Svcs, Constr Proj Spec 333 Westchester Ave, Suite 102 White Plains, NY 10604 914 459-6200	CONTACT NAME: Bryan McElwain PHONE (A/C, No, Ext): 914 459-6200 FAX (A/C, No): 610 537-4220 E-MAIL ADDRESS: bryan.mcelwain@usi.com														
INSURED A.L.A.C. Contracting Corp. 77 Bloomfield Avenue Staten Island, NY 10314	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: center;">NAIC #</th> </tr> <tr> <td>INSURER A : James River Insurance Company</td> <td style="text-align: center;">12203</td> </tr> <tr> <td>INSURER B : Allied World Specialty Insurance Co</td> <td style="text-align: center;">16624</td> </tr> <tr> <td>INSURER C :</td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : James River Insurance Company	12203	INSURER B : Allied World Specialty Insurance Co	16624	INSURER C :		INSURER D :		INSURER E :		INSURER F :	
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INSURER F :															

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			21811113	05/30/2023	11/20/2026	EACH OCCURRENCE \$ 3,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 6,000,000 PRODUCTS - COMP/OP AGG \$ 6,000,000 COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ EACH OCCURRENCE \$ AGGREGATE \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						 PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y / N <input checked="" type="checkbox"/> N / A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
B	Contractors Poll Marine Pollution Professional Liab			21824288 21824288 21824288	05/30/2023 05/30/2023 05/30/2023	11/20/2026 11/20/2026 11/20/2026	\$5,000,000 Limit \$1,000,000 Limit \$1,000,000 per claim

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Project #HPED800Q, Reconstruction of Tide Gate BIN#2-27069-0
 The following are included as additional insured for ongoing and completed operations if required by a written contract City of New York including its officials and employees, ConEd and Verizon.

CERTIFICATE HOLDER NYC Department of Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/04/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Ins Svcs, Constr Proj Spec 333 Westchester Ave, Suite 102 White Plains, NY 10604 914 459-6200	CONTACT NAME: Bryan McElwain PHONE (A/C, No., Ext): 914 459-6200 FAX (A/C, No.): 610 537-4220 E-MAIL ADDRESS: bryan.mcelwain@usi.com
	INSURER(S) AFFORDING COVERAGE
	NAIC #
	INSURER A : James River Insurance Company 12203
	INSURER B : LIBERTY MUTUAL FIRE INSURANCE CO. 23035
	INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR VWD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> DRIVE OTH CAR <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			AS2Z11C1W174023	01/01/2023	01/01/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	UMBRELLA LIAB <input type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			000693087	12/01/2022	12/01/2023	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y / N <input checked="" type="checkbox"/> N	N / A	WC2Z11C1W174013	01/01/2023	01/01/2024	<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Project #HPED800Q, Reconstruction of Tide Gate BIN#2-27069-0
The following are included as additional insured for ongoing and completed operations if required by a written contract City of New York including its officials and employees, ConEd and Verizon.
(Sample)

CERTIFICATE HOLDER NYC Department of Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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CITY OF NEW YORK
CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

USI Insurance Services LLC

[Name of broker or agent (typewritten)]

333 Westchester Ave., Ste. 102, White Plains, NY 10604

[Address of broker or agent (typewritten)]

Sarah.Palatucci@USI.com

[Email address of broker or agent (typewritten)]

(914) 459-6200/(610) 537-4220

[Phone number/Fax number of broker or agent (typewritten)]



[Signature of authorized official, broker, or agent]

Sarah J. Palatucci, Construction Leader

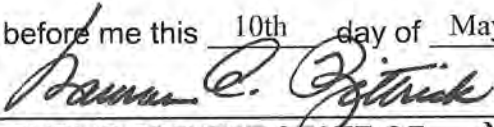
[Name and title of authorized official, broker, or agent (typewritten)]

State of New York)

) ss.:

County of Westchester)

Sworn to before me this 10th day of May, 20 23



NOTARY PUBLIC FOR THE STATE OF New York

MAUREEN A KITTRICK
NOTARY PUBLIC STATE OF NEW YORK
LIC. #01K14986881
COMMISSION EXPIRES 09/30/2025



CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only)
A.L.A.C. CONTRACTING CORP.
77 BLOOMFIELD AVENUE
STATEN ISLAND, NEW YORK 10314
Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)
1b. Business Telephone Number of Insured
(718) 494-8600
1c. NYS Unemployment Insurance Employer Registration Number of Insured
1d. Federal Employer Identification Number of Insured or Social Security Number
900197968
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)
NYC DEPARTMENT OF DESIGN AND CONSTRUCTION
30-30 TOMPSON AVENUE
LONG ISLAND CITY, NEW YORK 11101
3a. Name of Insurance Carrier
LIBERTY MUTUAL FIRE INSURANCE COMPANY
3b. Policy Number of Entity Listed in Box "1a"
WC2Z11C1W174013
3c. Policy effective period
01/01/2023 to 01/01/2024
3d. The Proprietor, Partners or Executive Officers are
[] included. (Only check box if all partners/officers included)
[X] all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: BRYAN MCELWAIN
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: [Signature] 05/05/2023
(Signature) (Date)

Title: SENIOR ACCOUNT MANAGER

Telephone Number of authorized representative or licensed agent of insurance carrier: 516-382-5643

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.
2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.



CERTIFICATE OF INSURANCE COVERAGE DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

<p>1a. Legal Name & Address of Insured (use street address only) ALAC CONTRACTING CORP 421 BROADWAY WEST BABYLON, NY 11704</p> <p>Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)</p>	<p>1b. Business Telephone Number of Insured 718-494-8600</p> <p>1c. Federal Employer Identification Number of Insured or Social Security Number 90-0197968</p>
<p>2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) NYC DEPARTMENT OF DESIGN AND CONSTRUCTION 30-30 THOMPSON AVENUE LONG ISLAND CITY, NY 11101</p>	<p>3a. Name of Insurance Carrier Standard Security Life Insurance Company of New York</p> <p>3b. Policy Number of Entity Listed in Box "1a" R09228-003</p> <p>3c. Policy effective period 6/1/2014 to 5/6/2024</p>

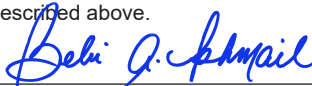
4. Policy provides the following benefits:

A. Both disability and paid family leave benefits.
 B. Disability benefits only.
 C. Paid family leave benefits only.

5. Policy covers:

A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
 B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 5/8/2023 By 
(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (212) 355-4141 Name and Title SUPERVISOR-DBL/POLICY SERVICES

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

**State of New York
Workers' Compensation Board**

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed _____ By _____
(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number _____ Name and Title _____

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. **Insurance brokers are NOT authorized to issue this form.**



Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in box "1a" for disability and/or paid family leave benefits under the New York State Disability and Paid Family Leave Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability and/or Paid Family Leave Benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or paid family leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability and/or Paid Family Leave Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability and Paid Family Leave Benefits Law.

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

LABOR LAW ARTICLE 8 - NYC PUBLIC WORKS

Workers, Laborers and Mechanics employed on a public work project must receive not less than the prevailing rate of wage and benefits for the classification of work performed by each upon such public work. Pursuant to New York Labor Law Article 8 the Comptroller of the City of New York has promulgated this schedule solely for Workers, Laborers and Mechanics engaged by private contractors on New York City public work projects. Prevailing rates are required to be annexed to and form part of the public work contract pursuant to Labor Law section 220 (3).

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to Labor Law section 220 (5). The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

Agency Chief Contracting Officers should contact the Bureau of Labor Law's Classification Unit with any questions concerning trade classifications, prevailing rates or prevailing practices with respect to procurement on New York City public work contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public work contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public work contracts in the procurement stage must contact the contracting agency responsible for the procurement.

Any error as to compensation under the prevailing wage law or other information as to trade classification, made by the contracting agency in the contract documents or in any other communication, will not preclude a finding against the contractor of prevailing wage violation.

Any questions concerning trade classifications, prevailing rates or prevailing practices on New York City public work contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-4443. All callers must have the agency name and contract registration number available when calling with questions on public work contracts. Please direct all other compliance issues to: laborlaw@comptroller.nyc.gov or Bureau of Labor Law, Attn: Paul Brumlik, Office of the Comptroller, 1 Centre Street, Room 651, New York, N.Y. 10007.

Pursuant to Labor Law § 220 (3-a) (a), the appropriate schedule of prevailing wages and benefits must be posted in a prominent and accessible place at all public work sites along with the Construction Poster provided on our web site at comptroller.nyc.gov/wages. In addition, covered employees must be given the appropriate schedule of prevailing wages and benefits along with the Worker Notice provided on our web site at the time the public work project begins, and with the first paycheck to each such employee after July first of each year.

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site comptroller.nyc.gov/wages. Contractors must pay the wages and supplements in effect when the worker, laborer, mechanic performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site comptroller.nyc.gov/wages.

Prevailing rates and ratios for apprentices are published in the Construction Apprentice Prevailing Wage Schedule. Pursuant to Labor Law § 220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant, registered with the

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

New York State Department of Labor, may be paid at the apprentice rates. Apprentices who are not so registered must be paid as journey persons.

New York City public work projects awarded pursuant to a Project Labor Agreement (“PLA”) in accordance with Labor Law section 222 may have different labor standards for shift, premium and overtime work. Please refer to the PLA’s pre-negotiated labor agreements for wage and benefit rates applicable to work performed outside of the regular workday. More information is available at the Mayor’s Office of Contract Services (MOCS) web page at:

<https://www1.nyc.gov/site/mocs/legal-forms/project-labor-agreements.page>

All the provisions of Labor Law Article 8 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller in accordance with the trade classifications in this schedule; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project’s pre-negotiated labor agreement.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

- 1) Provide bona fide fringe benefits which cost the employer no less than the prevailing supplemental benefits rate; or
- 2) Supplement the employee’s hourly wage by an amount no less than the prevailing supplemental benefits rate; or
- 3) Provide a combination of bona fide fringe benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.

Although prevailing wage laws do not require employers to provide bona fide fringe benefits (as opposed to wage supplements) to their employees, other laws may. For example, the Employee Retirement Income Security Act, 29 U.S.C. § 1001 et seq., the Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq., and the New York City Paid Sick Leave Law, N.Y.C. Admin. Code § 20-911 et seq., require certain employers to provide certain benefits to their employees. Labor agreements to which employers are a party may also require certain benefits. The Comptroller’s Office does not enforce these laws or agreements.

Employers must provide prevailing supplemental benefits at the straight time rate for each hour worked unless otherwise noted in the classification.

Paid Holidays, Vacation and Sick Leave when listed must be paid or provided in addition to the prevailing hourly supplemental benefit rate.

For more information, please refer to the Comptroller’s Prevailing Wage Law Regulations in Title 44 of the Rules of the City of New York, Chapter 2, available at comptroller.nyc.gov/wages.

Paul Brumlik
Director of Classifications
Bureau of Labor Law

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

TABLE OF CONTENTS

<u>CLASSIFICATION</u>	<u>PAGE</u>
ASBESTOS HANDLER	5
BLASTER	5
BOILERMAKER.....	6
BRICKLAYER.....	7
CARPENTER - BUILDING COMMERCIAL	8
CARPENTER - HEAVY CONSTRUCTION WORK	9
CARPENTER - HIGH RISE CONCRETE FORMS	10
CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST.....	11
CARPENTER - WOOD WATER STORAGE TANK	12
CEMENT & CONCRETE WORKER.....	13
CEMENT MASON	14
CORE DRILLER	14
DERRICKPERSON AND RIGGER	16
DIVER	17
DOCKBUILDER - PILE DRIVER.....	18
DRIVER: TRUCK (TEAMSTER)	19
ELECTRICIAN	21
ELECTRICIAN - ALARM TECHNICIAN.....	25
ELECTRICIAN-STREET LIGHTING WORKER	26
ELEVATOR CONSTRUCTOR	27
ELEVATOR REPAIR & MAINTENANCE.....	28
ENGINEER	29
ENGINEER - CITY SURVEYOR AND CONSULTANT.....	34
ENGINEER - FIELD (BUILDING CONSTRUCTION)	35
ENGINEER - FIELD (HEAVY CONSTRUCTION)	36
ENGINEER - FIELD (STEEL ERECTION)	37
ENGINEER - OPERATING	38
FLOOR COVERER	46
GLAZIER	47
GLAZIER - REPAIR & MAINTENANCE	48
HAZARDOUS MATERIAL HANDLER.....	48
HEAT AND FROST INSULATOR	49
HOUSE WRECKER	50
IRON WORKER - ORNAMENTAL.....	51
IRON WORKER - STRUCTURAL.....	52
LABORER	53
LANDSCAPING	54

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

MARBLE MECHANIC.....	55
MASON TENDER	57
MASON TENDER (INTERIOR DEMOLITION WORKER).....	58
METALLIC LATHER.....	59
MILLWRIGHT	59
MOSAIC MECHANIC.....	60
PAINTER	61
PAINTER - LINE STRIPING (ROADWAY).....	62
PAINTER - METAL POLISHER	63
PAINTER - SIGN.....	65
PAINTER - STRUCTURAL STEEL.....	65
PAPERHANGER	66
PAVER AND ROADBUILDER.....	67
PLASTERER	69
PLASTERER - TENDER.....	70
PLUMBER	71
PLUMBER (MECHANICAL EQUIPMENT AND SERVICE).....	72
PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION).....	72
PLUMBER: PUMP & TANK.....	73
POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER.....	74
ROOFER.....	75
SHEET METAL WORKER.....	75
SHEET METAL WORKER - SPECIALTY.....	77
SHIPYARD WORKER.....	78
SIGN ERECTOR.....	79
STEAMFITTER	80
STEAMFITTER - REFRIGERATION AND AIR CONDITIONER	81
STONE MASON - SETTER.....	82
TAPER.....	82
TELECOMMUNICATION WORKER.....	83
TILE FINISHER.....	84
TILE LAYER - SETTER	85
TIMBERPERSON	86
TUNNEL WORKER	87
UTILITY LOCATOR.....	89
WELDER.....	90

ASBESTOS HANDLER SEE HAZARDOUS MATERIAL HANDLER

BLASTER

Blaster

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$57.21**

Supplemental Benefit Rate per Hour: **\$50.43**

Blaster - Hydraulic Trac Drill

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$51.35**

Supplemental Benefit Rate per Hour: **\$50.43**

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$50.02**

Supplemental Benefit Rate per Hour: **\$50.43**

Blaster - Journeyperson

(Laborer, Chipper/Jackhammer including Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers and Hydro (Water) Demolition, Powder Carrier, Hydraulic Chuck Tender, Chuck Tender and Nipper)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$44.00**

Supplemental Benefit Rate per Hour: **\$50.43**

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.00**

Supplemental Benefit Rate per Hour: **\$50.43**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays

Labor Day
Thanksgiving Day

Shift Rates

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

BOILERMAKER

Boilermaker

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$64.38**

Supplemental Benefit Rate per Hour: **\$47.35**

Supplemental Note: For time and one half overtime - \$70.58 For double overtime - \$93.80

Overtime Description

For Repair and Maintenance work:

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

For New Construction work:

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Quadruple time the regular rate for work on the following holiday(s).
Labor Day

Paid Holidays

Good Friday
Day after Thanksgiving
Day before Christmas
Day before New Year's Day

Shift Rates

On jobs requiring two (2) or three (3) shifts, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work eight (8) hours and receive eight hours at the regular straight time hourly rate plus two dollars (\$2.00) per hour. The third shift shall work eight (8) hours and receive eight hours at the regular straight time hourly rate plus two dollars and twenty-five cents (\$2.25) per hour.

(Local #5)

BRICKLAYER

Bricklayer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$58.23**

Supplemental Benefit Rate per Hour: **\$37.75**

Overtime Description

Time and one half the regular rate after a 7 hour day. If working on a job that is predominately Pointer, Cleaner, Caulker work, then Time and one half the regular rate after an 8 hour day.

Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates

The second shift wage rate shall be a 15% wage premium with no premium for supplemental benefits. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, eight hours will be paid at straight time rate for seven hours of work.

(Bricklayer District Council)

CARPENTER - BUILDING COMMERCIAL

Building Commercial

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$55.05**

Supplemental Benefit Rate per Hour: **\$47.83**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Shift Rates

The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - HEAVY CONSTRUCTION WORK

(Construction of Engineered Structures and Building Foundations including all form work)

Heavy Construction Work

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$58.16**

Supplemental Benefit Rate per Hour: **\$54.26**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate and the supplemental benefits shall be paid at the straight time rate. When two (2) or more shifts of Carpenters are employed, single time will be paid for each shift.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS
(Excludes Engineered Structures and Building Foundations)

Carpenter High Rise A

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$50.78**

Supplemental Benefit Rate per Hour: **\$44.44**

Carpenter High Rise B

Carpenter High Rise B worker is excluded from high risk operations such as erection decking, perimeter debris netting, leading edge work, self-climbing form systems, and the installation of cocoon systems unless directly supervised by a Carpenter High Rise A worker.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$40.19**

Supplemental Benefit Rate per Hour: **\$17.75**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Shift Rates

The second shift wage rate shall be 113% of the straight time hourly wage rate. However, any shift beginning after 5:00 P.M. shall be paid at time and one half the regular hourly rate. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST

Carpenter - Hod Hoist

(Assisted by Mason Tender)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$53.00**

Supplemental Benefit Rate per Hour: **\$47.65**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

The second shift will receive 112% of the straight time hourly rate. Benefit fund contributions shall be paid at the straight time rate. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

(Carpenters District Council)

CARPENTER - WOOD WATER STORAGE TANK

Tank Mechanic

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$36.42**

Supplemental Benefit Rate per Hour: **\$23.10**

Tank Helper

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$28.76**

Supplemental Benefit Rate per Hour: **\$23.10**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Day after Thanksgiving

1/2 day on Christmas Eve if work is performed in the A.M.

Christmas Day

1/2 day on New Year's Eve if work is performed in the A.M.

Vacation

Employed for one (1) year.....one (1) week vacation (40 hours)

Employed for three (3) years.....two (2) weeks vacation (80 hours)

Employed for more than twenty (20) years.....three (3) weeks vacation (120 hours)

SICK LEAVE:

Two (2) sick days after being employed for twenty (20) years.

(Carpenters District Council)

CEMENT & CONCRETE WORKER

Cement & Concrete Worker

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.28**

Supplemental Benefit Rate per Hour: **\$30.20**

Supplemental Note: \$34.20 on Saturdays; \$38.20 on Sundays & Holidays

Cement & Concrete Worker - (Hired after 2/6/2016)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$35.80**

Supplemental Benefit Rate per Hour: **\$22.20**

Supplemental Note: \$24.20 on Saturdays; \$26.20 on Sundays & Holidays

Overtime Description

Time and one half the regular rate after 7 hour day (time and one half the regular rate after an 8 hour day when working with Dockbuilders on pile cap forms and for work below street level to the top of the foundation wall, not to exceed 2 feet or 3 feet above the sidewalk-brick shelf, when working on the foundation and structure.)

Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

1/2 day before Christmas Day

1/2 day before New Year's Day

Shift Rates

On shift work extending over a twenty-four hour period, all shifts are paid at straight time.

(Cement & Concrete Workers District Council 16)

CEMENT MASON

Cement Mason

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.77**

Supplemental Benefit Rate per Hour: **\$41.01**

Supplemental Note: Supplemental benefit time and one half rate: \$71.97; Double time rate: double the base supplemental benefit rate.

Overtime Description

Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and one-half the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on Sunday. Four Days a week at Ten (10) hours straight time is allowed.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

Shift Rates

For off shift work, (at times other than the regular 7:00 A.M. to 3:30 P.M. work day) a cement mason shall be paid at the regular hourly rate plus a 25% per hour differential.

(Local #780) (BCA)

CORE DRILLER

Core Driller

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 10/17/2022

Wage Rate per Hour: **\$42.54**

Supplemental Benefit Rate per Hour: **\$30.60**

Effective Period: 10/18/2022 - 6/30/2023

Wage Rate per Hour: **\$43.88**

Supplemental Benefit Rate per Hour: **\$31.35**

Core Driller Helper

Effective Period: 7/1/2022 - 10/17/2022

Wage Rate per Hour: **\$33.47**

Supplemental Benefit Rate per Hour: **\$30.60**

Effective Period: 10/18/2022 - 6/30/2023

Wage Rate per Hour: **\$34.47**

Supplemental Benefit Rate per Hour: **\$31.35**

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2022 - 10/17/2022

Wage Rate per Hour: **\$30.12**

Supplemental Benefit Rate per Hour: **\$30.60**

Effective Period: 10/18/2022 - 6/30/2023

Wage Rate per Hour: **\$31.02**

Supplemental Benefit Rate per Hour: **\$31.35**

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2022 - 10/17/2022

Wage Rate per Hour: **\$26.78**

Supplemental Benefit Rate per Hour: **\$30.60**

Effective Period: 10/18/2022 - 6/30/2023

Wage Rate per Hour: **\$27.58**

Supplemental Benefit Rate per Hour: **\$31.35**

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2022 - 10/17/2022

Wage Rate per Hour: **\$23.43**

Supplemental Benefit Rate per Hour: **\$30.60**

Effective Period: 10/18/2022 - 6/30/2023

Wage Rate per Hour: **\$24.13**

Supplemental Benefit Rate per Hour: **\$31.35**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime Description

Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Shift Rates

When two (2) or more shifts are employed, single time shall be paid for each shift, but those employees employed on a shift other than from 8:00 A.M. to 5:00 P.M. shall, in addition, receive two dollars (\$2.00) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

DERRICKPERSON AND RIGGER

Derrick Person & Rigger

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: \$57.76

Supplemental Benefit Rate per Hour: \$56.24

Derrick Person & Rigger - Site Work

Assists the Stone Mason-Setter in the setting of stone and paving stone.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: \$46.20

Supplemental Benefit Rate per Hour: \$44.97

Overtime Description

The first two hours of overtime on weekdays and the first seven hours of work on Saturdays are paid at time and one half for wages and supplemental benefits. All additional overtimes is paid at double time for wages and supplemental benefits.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

(Local #197)

DIVER

Diver (Marine)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$73.03**

Supplemental Benefit Rate per Hour: **\$54.26**

Diver Tender (Marine)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$52.57**

Supplemental Benefit Rate per Hour: **\$54.26**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates

When three shifts are utilized each shift shall work seven and one half-hours (7 1/2 hours) and paid for 8 hours, allowing for one half hour for lunch.

(Carpenters District Council)

DOCKBUILDER - PILE DRIVER

Dockbuilder - Pile Driver

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$58.16**
Supplemental Benefit Rate per Hour: **\$54.26**

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Carpenters District Council)

DRIVER: TRUCK (TEAMSTER)

Driver - Dump Truck

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$44.17**

Supplemental Benefit Rate per Hour: **\$53.95**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$24.00; at double time rate - \$32.00

Driver - Tractor Trailer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.32**

Supplemental Benefit Rate per Hour: **\$52.40**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$23.25; at double time rate - \$31.00

Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.88**

Supplemental Benefit Rate per Hour: **\$52.40**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$23.25; at double time rate - \$31.00

Overtime Description

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay. For Thanksgiving week, the prorated share shall be 5 1/3 hours of holiday pay for each day worked in Thanksgiving week.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Off shift work commencing between 6:00 P.M. and 4:30 A.M. shall work eight and one half (8 1/2) hours allowing for one half hour for lunch and receive 9 hours pay for 8 hours of work.

Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$40.89**

Supplemental Benefit Rate per Hour: **\$47.85**

Supplemental Note: Over 40 hours worked: time and one half rate \$18.68; double time rate \$24.90

Overtime Description

For Paid Holidays: Employees who do not work on a contractual holiday shall be compensated two (2) hours extra pay in straight time wages and benefits for every day on which the Employee does not pass up a day's work during the calendar week (Sunday through Saturday) of the holiday, up to a maximum of ten (10) hours in wages and eight (8) hours in benefit contributions for the holiday

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

President's Day
Columbus Day
Veteran's Day

Triple time the regular rate for work on the following holiday(s).

New Year's Day
Memorial Day
Independence Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Christmas Day

(Local #282)

ELECTRICIAN

(Including installation of low voltage cabling carrying data, video and/or voice on building construction/alteration/renovation projects.)

Electrician "A" (Regular Day / Day Shift)

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$59.00**

Supplemental Benefit Rate per Hour: **\$57.84**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$61.00**

Supplemental Benefit Rate per Hour: **\$60.06**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Regular Day Overtime after 7 hrs / Day Shift Overtime after 8 hrs)

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$88.50**

Supplemental Benefit Rate per Hour: **\$59.74**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$91.50**

Supplemental Benefit Rate per Hour: **\$62.02**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Electrician "A" (Swing Shift)

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$69.23**

Supplemental Benefit Rate per Hour: **\$65.68**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$71.57**

Supplemental Benefit Rate per Hour: **\$68.14**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Swing Shift Overtime after 7.5 hours)

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$103.85**

Supplemental Benefit Rate per Hour: **\$67.90**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$107.36**

Supplemental Benefit Rate per Hour: **\$70.45**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$77.54**

Supplemental Benefit Rate per Hour: **\$72.31**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$80.17**

Supplemental Benefit Rate per Hour: **\$74.99**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Graveyard Shift Overtime after 7 hours)

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$116.31**

Supplemental Benefit Rate per Hour: **\$74.80**

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$120.26**

Supplemental Benefit Rate per Hour: **\$77.57**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

* Supplemental Benefit Rate per Hour Note

In addition to the Supplemental Benefit Rates per Hour listed above, the employer must provide an additional 6.2% of taxable gross pay earned on covered work only. This additional Supplemental Benefit Rate will terminate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

when the employee has contributed the maximum annual Social Security tax required by law, on all work performed.

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on a holiday.

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

For multiple shifts of temporary light and/or power, the temporary light and/or power employee shall be paid for 8 hours at the straight time rate. For three or less workers performing 8 hours temporary light and/or power the supplemental benefit rate is \$24.36, effective 04/13/2023 the supplemental benefit rate is \$24.78 - See * Supplemental Benefit Rate per Hour Note above.

Electrician "M" (First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$31.25**

Supplemental Benefit Rate per Hour: **\$25.30**

First and Second Year "M" Wage Rate Per Hour: **\$26.75**

First and Second Year "M" Supplemental Rate: **\$22.88**

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$31.25**

Supplemental Benefit Rate per Hour: **\$26.55**

First and Second Year "M" Wage Rate Per Hour: **\$26.75**

First and Second Year "M" Supplemental Rate: **\$24.13**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Electrician "M" (Overtime After First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2022 - 4/12/2023

Wage Rate per Hour: **\$46.88**

Supplemental Benefit Rate per Hour: **\$27.28**

First and Second Year "M" Wage Rate Per Hour: **\$40.13**

First and Second Year "M" Supplemental Rate: **\$24.57**

Effective Period: 4/13/2023 - 6/30/2023

Wage Rate per Hour: **\$46.88**

Supplemental Benefit Rate per Hour: **\$28.53**

First and Second Year "M" Wage Rate Per Hour: **\$40.13**

First and Second Year "M" Supplemental Rate: **\$25.82**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

(Local #3)

ELECTRICIAN - ALARM TECHNICIAN

(Scope of Work - Inspect, test, repair, and replace defective, malfunctioning, or broken devices, components and controls of Fire, Burglar and Security Systems)

Alarm Technician

Effective Period: 7/1/2022 - 3/8/2023

Wage Rate per Hour: **\$35.40**

Supplemental Benefit Rate per Hour: **\$19.79**

Supplemental Note: \$17.91 only after 8 hours worked in a day

Effective Period: 3/9/2023 - 6/30/2023

Wage Rate per Hour: **\$36.40**

Supplemental Benefit Rate per Hour: **\$20.67**

Supplemental Note: \$18.80 only after 8 hours worked in a day

Overtime Description

Time and one half the regular rate for work on the following holidays: Columbus Day, Veterans Day, Day after Thanksgiving.

Double time the regular rate for work on the following holidays: New Year's day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Paid Holidays

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Shift Rates

Night Differential is based upon a ten percent (10%) differential between the hours of 4:00 P.M. and 12:30 A.M. and a fifteen percent (15%) differential for the hours 12:00 A.M. to 8:30 A.M.

Vacation

At least 1 year of employment.....ten (10) days

5 years or more of employment.....fifteen (15) days

10 years of employment.....twenty (20) days

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Plus one Personal Day per year

Sick Days:

One day per Year. Up to 4 vacation days may be used as sick days.

(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2022 - 4/19/2023

Wage Rate per Hour: **\$59.00**

Supplemental Benefit Rate per Hour: **\$59.85**

Effective Period: 4/20/2023 - 6/30/2023

Wage Rate per Hour: **\$61.00**

Supplemental Benefit Rate per Hour: **\$62.13**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2022 - 4/18/2023

Wage Rate per Hour: **\$44.66**

Supplemental Benefit Rate per Hour: **\$45.27**

Effective Period: 4/20/2023 - 6/30/2023

Wage Rate per Hour: **\$46.66**

Supplemental Benefit Rate per Hour: **\$47.16**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician - Electro Pole Maintainer

Effective Period: 7/1/2022 - 4/18/2023

Wage Rate per Hour: **\$38.61**

Supplemental Benefit Rate per Hour: **\$41.00**

Effective Period: 4/20/2023 - 6/30/2023

Wage Rate per Hour: **\$40.61**

Supplemental Benefit Rate per Hour: **\$42.88**

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

* Supplemental Benefit Rate per Hour Note

In addition to the Supplemental Benefit Rates per Hour listed above, the employer must provide an additional 6.2% of taxable gross pay earned on covered work only. This additional Supplemental Benefit Rate will terminate when the employee has contributed the maximum annual Social Security tax required by law, on all work performed.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime Description

Electrician - Electro Pole Electrician: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week.

Electrician - Electro Pole Foundation Installer: Time and one half the regular rate after 8 hours within a 24 hour period and Saturday and Sunday.

Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

(Local #3)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2022 - 3/16/2023

Wage Rate per Hour: **\$75.14**

Supplemental Benefit Rate per Hour: **\$39.11**

Effective Period: 3/17/2023 - 6/30/2023

Wage Rate per Hour: **\$77.49**

Supplemental Benefit Rate per Hour: **\$40.62**

Overtime Description

For New Construction: work performed after an 8 hour day, Saturday, Sunday or between 4:30pm and 7:00am shall be paid at double time rate.

Existing buildings: work performed after an 8 hour day, Saturday, Sunday or between 5:30pm and 7:00 am shall be paid time and one half.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Vacation

Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

ELEVATOR REPAIR & MAINTENANCE

Elevator Service/Modernization Mechanic

Effective Period: 7/1/2022 - 3/16/2023

Wage Rate per Hour: **\$59.09**

Supplemental Benefit Rate per Hour: **\$39.01**

Effective Period: 3/17/2023 - 6/30/2023

Wage Rate per Hour: **\$60.89**

Supplemental Benefit Rate per Hour: **\$40.52**

Overtime Description

For Scheduled Service Work: Double time - work scheduled in advance by two or more workers performed on Sundays, Holidays, and between midnight and 7:00am.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Afternoon shift - regularly hourly rate plus a (15%) fifteen percent differential. Graveyard shift - time and one half the regular rate.

Vacation

Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

ENGINEER

Engineer - Heavy Construction Operating Engineer I

Cherry pickers 20 tons and over and Loaders (rubber tired and/or tractor type with a manufacturer's minimum rated capacity of six cubic yards and over).

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$74.86**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$119.78**

Engineer - Heavy Construction Operating Engineer II

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherry pickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE**

nature, shot blaster, skid steer machines and machines of a similar nature including bobcat, pile rig rubber-tired excavator (37,000 lbs. and under), 2 man auger.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$72.55**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$116.08**

Engineer - Heavy Construction Operating Engineer III

Minor Equipment such as Tractors, Post Hole Diggers, Ditch Witch (Walk Behind), Road Finishing Machines, Rollers five tons and under, Tugger Hoists, Dual Purpose Trucks, Fork Lifts, and Dempsey Dumpers, Fireperson.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$68.68**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$109.89**

Engineer - Heavy Construction Maintenance Engineer I

Installing, Repairing, Maintaining, Dismantling and Manning of all equipment including Steel Cutting, Bending and Heat Sealing Machines, Mechanical Heaters, Grout Pumps, Bentonite Pumps & Plants, Screening Machines, Fusion Coupling Machines, Tunnel Boring Machines Moles and Machines of a similar nature, Power Packs, Mechanical Hydraulic Jacks; all drill rigs including but not limited to Churn, Rotary Caisson, Raised Bore & Drills of a similar nature; Personnel, Inspection & Safety Boats or any boats used to perform functions of same, Mine Hoists, Whirlies, all Climbing Cranes, all Tower Cranes, including but not limited to Truck Mounted and Crawler Type and machines of similar nature; Maintaining Hydraulic Drills and machines of a similar nature; Well Point System-Installation and dismantling; Burning, Welding, all Pumps regardless of size and/or motor power, except River Cofferdam Pumps and Wells Point Pumps; Motorized Buggies (three or more); equipment used in the cleaning and televising of sewers, but not limited to jet-rodder/vacuum truck, vacall/vactor, closed circuit television inspection equipment; high powered water pumps, jet pumps; screed machines and concrete finishing machines of a similar nature; vermeers.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$72.19**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$115.50**

Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$95.74**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$153.18**

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.62**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$74.59**

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.90**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$76.64**

Engineer - Heavy Construction Service Engineer

Gradalls: Concrete Pumps: Power Houses: Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$64.78**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$103.65**

Engineer - Heavy Construction Service Mechanic

Shovels: Cranes: Draglines: Backhoes: Keystones: Pavers: Trenching Machines: Gunite Machines: Compressors (three (3) or more in Battery): Crawler Cranes- having a straight lattice boom with no attachment or luffing boom, no jib and no auxiliary attachment.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$43.90**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$70.24**

Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$69.19**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Shift Wage Rate: **\$110.70**

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$64.57**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$103.31**

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$48.44**

Supplemental Benefit Rate per Hour: **\$44.72**

Supplemental Note: \$82.04 on overtime

Shift Wage Rate: **\$77.50**

Overtime Description

On jobs of more than one shift, if the next shift employee fails to report for work through any cause over which the employer has no control, the employee on duty who works the next shift continues to work at the single time rate.

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

Engineer - Building Work Maintenance Engineers I

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE**

Installing, repairing, maintaining, dismantling (of all equipment including: Steel Cutting and Bending Machines, Mechanical Heaters, Mine Hoists, Climbing Cranes, Tower Cranes, Linden Peine, Lorain, Liebherr, Mannes, or machines of a similar nature, Well Point Systems, Deep Well Pumps, Concrete Mixers with loading Device, Concrete Plants, Motor Generators when used for temporary power and lights), skid steer machines of a similar nature including bobcat.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$64.47**

Supplemental Benefit Rate per Hour: **\$43.81**

Supplemental Note: \$80.22 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$49.42**

Supplemental Benefit Rate per Hour: **\$43.81**

Supplemental Note: \$80.22 on overtime

Engineer - Building Work Oilers I

All gasoline, electric, diesel or air operated Gradealls: Concrete Pumps, Overhead Cranes in Power Houses: Their duties shall be to assist the Engineer in oiling, greasing and repairing of all machines; Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$61.15**

Supplemental Benefit Rate per Hour: **\$43.81**

Supplemental Note: \$80.22 on overtime

Engineer - Building Work Oilers II

Oilers on Crawler Cranes, Backhoes, Trenching Machines, Guniting Machines, Compressors (three or more in Battery).

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$44.68**

Supplemental Benefit Rate per Hour: **\$43.81**

Supplemental Note: \$80.22 on overtime

Overtime Description

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

Shift Rates

When two (2) or more shifts are employed, single time will be paid for each shift.

(Local #15)

ENGINEER - CITY SURVEYOR AND CONSULTANT

Party Chief

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$42.49**

Supplemental Benefit Rate per Hour: **\$25.50**

Supplemental Note: Overtime Benefit Rate - \$30.50 per hour (time & one half) \$35.50 per hour (double time).

Instrument Person

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$34.64**

Supplemental Benefit Rate per Hour: **\$25.50**

Supplemental Note: Overtime Benefit Rate - \$30.50 per hour (time & one half) \$35.50 per hour (double time).

Rodperson

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$29.69**

Supplemental Benefit Rate per Hour: **\$25.50**

Supplemental Note: Overtime Benefit Rate - \$30.50 per hour (time & one half) \$35.50 per hour (double time).

Overtime Description

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

- New Year's Day
- Lincoln's Birthday
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (BUILDING CONSTRUCTION) (Construction of Building Projects, Concrete Superstructures, etc.)

Field Engineer - BC Party Chief

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$66.46**

Supplemental Benefit Rate per Hour: **\$40.09**

Supplemental Note: Overtime Benefit Rate - \$56.54 per hour (time & one half) \$72.98 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$50.97**

Supplemental Benefit Rate per Hour: **\$40.09**

Supplemental Note: Overtime Benefit Rate - \$56.54 per hour (time & one half) \$72.98 per hour (double time).

Field Engineer - BC Rodperson

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$31.90**

Supplemental Benefit Rate per Hour: **\$40.09**

Supplemental Note: Overtime Benefit Rate - \$56.54 per hour (time & one half) \$72.98 per hour (double time).

Overtime Description

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Time and one half the regular rate after a 7 hour work and time and one half the regular rate for Saturday for the first seven hours worked, Double time the regular time rate for Saturday for work performed in excess of seven hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (HEAVY CONSTRUCTION) (Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations, Engineering Structures etc.)

Field Engineer - HC Party Chief

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$77.31**

Supplemental Benefit Rate per Hour: **\$42.52**

Supplemental Note: Overtime benefit rate - \$60.06 per hour (time & one half), \$77.60 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$55.97**

Supplemental Benefit Rate per Hour: **\$42.52**

Supplemental Note: Overtime benefit rate - \$60.06 per hour (time & one half), \$77.60 per hour (double time).

Field Engineer - HC Rodperson

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.47**

Supplemental Benefit Rate per Hour: **\$42.52**

Supplemental Note: Overtime benefit rate - \$60.06 per hour (time & one half), \$77.60 per hour (double time).

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime Description

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (STEEL ERECTION)

Field Engineer - Steel Erection Party Chief

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$71.98**

Supplemental Benefit Rate per Hour: **\$42.07**

Supplemental Note: Overtime benefit rate - \$59.38 per hour (time & one half), \$76.69 per hour (double time).

Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$55.42**

Supplemental Benefit Rate per Hour: **\$42.07**

Supplemental Note: Overtime benefit rate - \$59.38 per hour (time & one half), \$76.69 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$36.05**

Supplemental Benefit Rate per Hour: **\$42.07**

Supplemental Note: Overtime benefit rate - \$59.38 per hour (time & one half), \$76.69 per hour (double time).

Overtime Description

Time and one half the regular rate for Saturday for the first eight hours worked.
Double time the regular rate for Saturday for work performed in excess of eight hours.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime

Time and one half the regular rate after an 8 hour day.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - OPERATING

Operating Engineer - Road & Heavy Construction I

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$88.32**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$141.31**

Operating Engineer - Road & Heavy Construction II

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$91.40**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$146.24**

Operating Engineer - Road & Heavy Construction III

Mine Hoists (Cranes, etc. when used as Mine Hoists)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$94.31**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$150.90**

Operating Engineer - Road & Heavy Construction IV

Gradealls, Keystones, Cranes on land or water (with digging buckets), Bridge Cranes, Vermeer Cutter and machines of a similar nature, Trenching Machines.

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$92.06**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$147.30**

Operating Engineer - Road & Heavy Construction V

Pile Drivers & Rigs (working alongside Dock Builder foreperson): Derrick Boats, Tunnel Shovels.

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$90.26**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$144.42**

Operating Engineer - Road & Heavy Construction VI

Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$85.80**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$137.28**

Operating Engineer - Road & Heavy Construction VII

Barrier Movers, Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$69.52**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$111.23**

Operating Engineer - Road & Heavy Construction VIII

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Utility Compressors

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$54.21**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$68.04**

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$81.67**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$130.67**

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$75.16**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$120.26**

Operating Engineer - Road & Heavy Construction XI

Compressors (Portable 3 or more in battery), Driving of Truck Mounted Compressors, Well-point Pumps, Tugger Machines Well Point Pumps, Churn Drill.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$58.61**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$93.78**

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$86.71**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: \$64.40 overtime hours

Shift Wage Rate: **\$138.74**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Operating Engineer - Road & Heavy Construction XIII

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$84.02**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Shift Wage Rate: **\$134.43**

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$80.36**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Shift Wage Rate: **\$128.58**

Operating Engineer - Road & Heavy Construction XV

Compressors (Portable Single or two in Battery, not over 100 feet apart), Pumps (River Cofferdam) and Welding Machines, Push Button Machines, All Engines Irrespective of Power (Power-Pac) used to drive auxiliary equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$54.56**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Shift Wage Rate: **\$87.30**

Operating Engineer - Road & Heavy Construction XVI

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$76.80**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Shift Wage Rate: **\$122.88**

Operating Engineer - Road & Heavy Construction XVII

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$77.36**

Supplemental Benefit Rate per Hour: **\$35.30**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: \$123.78

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$110.56
Supplemental Benefit Rate per Hour: \$35.30
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: \$176.90

Operating Engineer - Paving I

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$85.80
Supplemental Benefit Rate per Hour: \$35.30
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: \$137.28

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$83.63
Supplemental Benefit Rate per Hour: \$35.30
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: \$133.81

Operating Engineer - Paving III

Asphalt Plants

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$70.88
Supplemental Benefit Rate per Hour: \$35.30
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: \$113.41

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$91.66

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$54.97**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours

Operating Engineer - Concrete III

Micro-traps (Negative Air Machines), Vac-All Remediation System.

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$73.46**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$95.02**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$152.03**

Operating Engineer - Steel Erection II

Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$91.33**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$146.13**

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$54.68**
Supplemental Benefit Rate per Hour: **\$35.30**
Supplemental Note: \$64.40 overtime hours
Shift Wage Rate: **\$87.49**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine. (Public Works Only)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$52.10**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Shift Wage Rate: **\$83.36**

Operating Engineer - Building Work I

Forklifts, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$73.28**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Operating Engineer - Building Work II

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, Jacking System, etc.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$54.94**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$86.78**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$91.86**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$81.38**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$80.52**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

Operating Engineer - Building Work VII

Rack & Pinion and House Cars

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$64.09**

Supplemental Benefit Rate per Hour: **\$35.30**

Supplemental Note: **\$64.40** overtime hours

For New House Car projects Wage Rate per Hour **\$51.21**

For New House Car projects: Supplemental Benefit overtime hours: **\$49.85**

Overtime Description

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE**

Thanksgiving Day
Day after Thanksgiving
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

Shift Rates

When two (2) or more shifts are employed, single time will be paid for each shift.

For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

FLOOR COVERER

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

Floor Coverer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$55.05**

Supplemental Benefit Rate per Hour: **\$47.83**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Day before Christmas

Christmas Day

Day before New Year's Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Shift Rates

Two shifts may be utilized with the first shift working 8 a.m. to the end of the shift at straight time rate of pay. The wage rate for the second shift consisting of 7 hours shall be paid at 114.29% of straight time wage rate. The wage rate for the second shift consisting of 8 hours shall be paid 112.5% of the straight time wage rate. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

GLAZIER

(New Construction, Remodeling, and Alteration)

Glazier

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.55**

Supplemental Benefit Rate per Hour: **\$50.04**

Supplemental Note: Supplemental Benefit Overtime Rate: \$75.07

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

Shifts shall be any 8 consecutive hours after the normal working day for which the Glazier shall receive 9 hours pay for 8 hours worked.

(Local #1281)

GLAZIER - REPAIR & MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building.)

Craft Jurisdiction for repair, maintenance and fabrication

Plate glass replacement, Residential glass replacement, Residential mirrors and shower doors, Storm windows and storm doors, Residential replacement windows, Herculite door repairs, Door closer repairs, Retrofit apartment house (non-commercial buildings), Glass tinting.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$26.40**

Supplemental Benefit Rate per Hour: **\$25.32**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on the following holiday(s).

Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Local #1281)

HAZARDOUS MATERIAL HANDLER

(Removal, abatement, encapsulation or decontamination of asbestos, lead, mold, or other toxic or hazardous waste/materials)

Handler

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$38.05**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$19.10**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$38.05**

Supplemental Benefit Rate per Hour: **\$19.60**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

Time and one half the regular hourly rate after 40 straight time hours in any work week.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Easter

Paid Holidays

None

(Local #78 and Local #12A)

HEAT AND FROST INSULATOR

Heat & Frost Insulator

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$62.71**

Supplemental Benefit Rate per Hour: **\$41.91**

Overtime Description

Double time shall be paid for supplemental benefits during overtime work.

8th hour paid at time and one half.

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Triple time the regular rate for work on the following holiday(s).
Labor Day

Paid Holidays

None

Shift Rates

The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium. There must be a first shift to work the second shift, and a second shift to work the third shift. Off-hour jobs in occupied buildings may be worked on weekdays with an increment of one-dollar (\$1.00) per hour and eight (8) hours pay for seven (7) hours worked.

(Local #12) (BCA)

HOUSE WRECKER (TOTAL DEMOLITION)

House Wrecker - Tier A

On all work sites the first, second, eleventh and every third House Wrecker thereafter will be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). Other House Wreckers may be Tier B House Wreckers.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$38.23**

Supplemental Benefit Rate per Hour: **\$30.97**

House Wrecker - Tier B

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$27.46**

Supplemental Benefit Rate per Hour: **\$23.38**

Overtime

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

Iron Worker - Ornamental

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.65**

Supplemental Benefit Rate per Hour: **\$61.62**

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Overtime Description

Time and one half the regular rate after a 7 hour day for a maximum of two hours on any regular work day (the 8th and 9th hour) and double time shall be paid for all work on a regular work day thereafter, time and one half the regular rate for Saturday for the first seven hours of work and double time shall be paid for all work on a Saturday thereafter.

Overtime

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Paid Holidays

None

Shift Rates

When two or three shifts are employed on a job, Monday through Friday, the second and third shift are paid eight and one half (8 1/2) hours at the straight time rate for seven (7) hours of work, and ten (10) hours at the straight time rate for eight (8) hours of work. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, eight hours will be paid at straight time rate for seven hours of work, and all overtime shall be paid at time and one-half the regular straight time rates but on Sundays and Holidays, time and one-half the regular straight time rate shall be paid for all work up to seven (7) hours and double time shall be paid for all work thereafter.

(Local #580)

IRON WORKER - STRUCTURAL

Iron Worker - Structural

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$55.70**

Supplemental Benefit Rate per Hour: **\$84.79**

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

Overtime Description

Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time. Four Days a week at Ten (10) hours straight time is allowed.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter: Sunday all shifts are paid at double time.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday.

(Local #40 & #361)

LABORER

(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

Laborer

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$44.00**

Supplemental Benefit Rate per Hour: **\$50.43**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

Paid Holidays

Labor Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Thanksgiving Day

Shift Rates

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

LANDSCAPING

(Landscaping tasks, such as tree pruning, tree removing and spraying in connection with Green Infrastructure maintenance and the planting of street trees and trees in City parks, but not when such activities are performed as part of construction or reconstruction projects.)

Landscaper (Year 6 and above)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$35.06**

Supplemental Benefit Rate per Hour: **\$17.55**

Landscaper (Year 3 - 5)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$33.93**

Supplemental Benefit Rate per Hour: **\$17.55**

Landscaper (up to 3 years)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$31.09**

Supplemental Benefit Rate per Hour: **\$17.55**

Groundperson

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$31.09**

Supplemental Benefit Rate per Hour: **\$17.55**

Tree Remover / Pruner

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$40.76**

Supplemental Benefit Rate per Hour: **\$17.55**

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$29.39**

Supplemental Benefit Rate per Hour: **\$17.55**

Watering - Plant Maintainer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$23.68**

Supplemental Benefit Rate per Hour: **\$17.55**

Overtime Description

For all overtime work performed, supplemental benefits shall include an additional seventy-five (\$0.75) cents per hour.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Shift Rates

Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)

MARBLE MECHANIC

Marble Setter

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$57.17**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$42.26**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$57.40**

Supplemental Benefit Rate per Hour: **\$42.66**

Marble Finisher

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$44.42**

Supplemental Benefit Rate per Hour: **\$39.46**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$44.65**

Supplemental Benefit Rate per Hour: **\$39.76**

Marble Polisher

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$43.35**

Supplemental Benefit Rate per Hour: **\$32.26**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$43.71**

Supplemental Benefit Rate per Hour: **\$32.46**

Marble Maintenance Finisher

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$27.01**

Supplemental Benefit Rate per Hour: **\$13.99**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$27.17**

Supplemental Benefit Rate per Hour: **\$14.23**

Overtime Description

Supplemental Benefit contributions are to be made at the applicable overtime rates.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

(Local #7)

MASON TENDER

Mason Tender

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$39.95**

Supplemental Benefit Rate per Hour: **\$31.99**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

The employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate. When it is not possible to conduct alteration work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

(Local #79)

MASON TENDER (INTERIOR DEMOLITION WORKER)

Mason Tender Tier A

Tier A Interior Demolition Worker performs all burning, chopping, and other technically skilled tasks related to interior demolition work.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$37.69**

Supplemental Benefit Rate per Hour: **\$26.10**

Mason Tender Tier B

Tier B Interior Demolition Worker performs manual work and work incidental to demolition work, such as loading and carting of debris from the work site to an area where it can be loaded in to bins/trucks for removal. Also performs clean-up of the site when demolition is completed.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$26.88**

Supplemental Benefit Rate per Hour: **\$20.42**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

(Local #79)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

METALLIC LATHER

Metallic Lather

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.40**

Supplemental Benefit Rate per Hour: **\$51.30**

Supplemental Note: For time and one half overtime - \$63.05 For double overtime - \$79.10

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

Off-shift work outside of normal working hours shall receive straight time rate plus \$12 per hour for the first eight (8) hours.

(Local #46)

MILLWRIGHT

Millwright

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$57.80**

Supplemental Benefit Rate per Hour: **\$55.96**

Overtime

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

Second and third shifts receives the straight time rate of pay plus fifteen (15%) percent allowing for one half hour for a meal. There must be a first shift to work a second and third shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen (15%) percent for weekday hours.

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$52.75**

Supplemental Benefit Rate per Hour: **\$44.37**

Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$51.14**

Supplemental Benefit Rate per Hour: **\$44.37**

Mosaic Mechanic - Machine Operator Grinder

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$51.14**

Supplemental Benefit Rate per Hour: **\$44.37**

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Good Friday

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

(Local #7)

PAINTER

Painter - Brush & Roller

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$43.00**

Supplemental Benefit Rate per Hour: **\$38.78**

Supplemental Note: \$46.62 on overtime

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.00**

Supplemental Benefit Rate per Hour: **\$38.78**

Supplemental Note: \$46.62 on overtime

Overtime

Time and one half the regular rate after a 7 hour day.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

(District Council of Painters #9)

PAINTER - LINE STRIPING (ROADWAY)

Striping - Machine Operator

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$39.00**

Supplemental Benefit Rate per Hour: **\$15.27**

Supplemental Note: Overtime Supplemental Benefit rate - \$15.90

Lineperson (Thermoplastic)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$43.00**

Supplemental Benefit Rate per Hour: **\$15.27**

Supplemental Note: Overtime Supplemental Benefit rate - \$15.90

Striping Assistant & Traffic Safety

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$37.00**

Supplemental Benefit Rate per Hour: **\$15.27**

Supplemental Note: Overtime Supplemental Benefit rate - \$15.90

Overtime Description

For Paid Holidays: Employees will only receive Holiday Pay for holidays not worked if said employee worked both the regularly scheduled workday before and after the holiday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Vacation

Employees with one to two years service shall accrue vacation based on hours worked: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation.

(Local #1010)

PAINTER - METAL POLISHER

METAL POLISHER

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$32.51**

Supplemental Benefit Rate per Hour: **\$10.92**

METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$33.46**

Supplemental Benefit Rate per Hour: **\$10.92**

METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$36.01**

Supplemental Benefit Rate per Hour: **\$10.92**

ASSISTANT METAL POLISHER

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$25.31**

Supplemental Benefit Rate per Hour: **\$10.44**

ASSISTANT METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$26.26**

Supplemental Benefit Rate per Hour: **\$10.44**

ASSISTANT METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$27.81**

Supplemental Benefit Rate per Hour: **\$10.44**

Overtime Description

All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to circumstances beyond the control of the employer, up to a maximum of eight (8) hours per week, may be worked on Saturday at the straight time rate.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Triple time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Shift Rates

Four Days a week at Ten (10) hours straight a day.

Local 8A-28A

PAINTER - SIGN

Sign Painter

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$45.54**

Supplemental Benefit Rate per Hour: **\$22.29**

Assistant Sign Painter

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$38.70**

Supplemental Benefit Rate per Hour: **\$20.20**

Overtime Description

If any employee is required to work on any of the paid holidays then the employee shall receive double time rate of wages as well as the holiday pay for that day.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Paid Holidays

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Vacation

At least 1 year of employment.....1 week

2 years or more of employment.....2 weeks

8 years or more of employment.....3 weeks

(Local #8A-28A)

PAINTER - STRUCTURAL STEEL

Painters on Structural Steel

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$53.00**

Supplemental Benefit Rate per Hour: **\$49.83**

Painter - Power Tool

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$59.50**

Supplemental Benefit Rate per Hour: **\$49.83**

Overtime Wage Rate: **\$6.50** above the "Painters on Structural Steel" overtime rate.

Overtime Description

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Second shift is paid at regular hourly wage rates plus a ten percent (10%) differential. There must be a first shift in order to work a second shift.

(Local #806)

PAPERHANGER

Paperhanger

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.37**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$39.06**

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

Evening shift - 4:30 P.M. to 12:00 Midnight (regular rate of pay); any work performed before 7:00 A.M. shall be at time and one half the regular base rate of pay.

(District Council of Painters #9)

PAVER AND ROADBUILDER

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$48.35**

Supplemental Benefit Rate per Hour: **\$50.19**

Supplemental Note: For time and one half overtime - \$54.44 For double overtime - \$58.69

Paver & Roadbuilder - Laborer

Paving and road construction work, regardless of material used, including but not limited to preparation of job sites, removal of old surfaces, asphalt and/or concrete, by whatever method, including but not limited to milling; laying of concrete; laying of asphalt for temporary, patchwork, and utility paving (but not production paving); site preparation and incidental work for installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry/seal coating, paving stones, maintenance of safety surfaces; play equipment installation, and other related work.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$44.48**

Supplemental Benefit Rate per Hour: **\$50.19**

Supplemental Note: For time and one half overtime - \$54.44 For double overtime - \$58.69

Production Paver & Roadbuilder - Screed Person

(Production paving is asphalt paving when using a paving machine or on a project where a paving machine is traditionally used)

Adjustment of paving machinery on production paving jobs.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$48.95**

Supplemental Benefit Rate per Hour: **\$50.19**

Supplemental Note: For time and one half overtime - \$54.44 For double overtime - \$58.69

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$48.35**

Supplemental Benefit Rate per Hour: **\$50.19**

Supplemental Note: For time and one half overtime - \$54.44 For double overtime - \$58.69

Production Paver & Roadbuilder - Shoveler

General laborer (except removal of surfaces - see Paver and Roadbuilder-Laborer) including but not limited to tamper, AC paint and liquid tar work.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$44.48**

Supplemental Benefit Rate per Hour: **\$50.19**

Supplemental Note: For time and one half overtime - \$54.44 For double overtime - \$58.69

Overtime Description

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

Memorial Day

Independence Day

Labor Day

Columbus Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Thanksgiving Day

Paid Holidays

Memorial Day
Independence Day
Labor Day
Thanksgiving Day

Shift Rates

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours at the straight time rate since only one half (1/2) hour is allowed for meal time.

When two or more shifts are employed, single time will be paid for each shift.

Night Work - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

PLASTERER

Plasterer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.03**

Supplemental Benefit Rate per Hour: **\$28.79**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Paid Holidays

None

Shift Rates

When it is not possible to conduct work during regular working hours (between 6:30am and 4:30pm), a shift differential shall be paid at the regular hourly rate plus a twelve percent (12%) per hour differential. Workers on shift work shall be allowed a paid one-half hour meal break.

(Local #262)

PLASTERER - TENDER

Plasterer - Tender

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$39.95**

Supplemental Benefit Rate per Hour: **\$31.99**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

When work commences outside regular work hours, workers receive an hour additional (differential) wage and supplement payment. Eight hours pay for seven hours work or nine hours pay for eight hours work.

(Mason Tenders District Council)

PLUMBER

Plumber

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$72.50**

Supplemental Benefit Rate per Hour: **\$41.45**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Plumber - Temporary Services

Temporary Services - When there are no Plumbers on the job site, there may be three shifts designed to cover the entire twenty-four hour period, including weekends if necessary, at the following rate straight time.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$58.08**

Supplemental Benefit Rate per Hour: **\$33.08**

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Shift Rates

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday.

50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)
(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

Plumber

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.60**

Supplemental Benefit Rate per Hour: **\$19.96**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

(Plumbers Local # 1)

PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$50.35**

Supplemental Benefit Rate per Hour: **\$29.73**

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday.
50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

PLUMBER: PUMP & TANK

Oil Trades (Installation and Maintenance)

Plumber - Pump & Tank

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$69.73**

Supplemental Benefit Rate per Hour: **\$28.48**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER

(Exterior Building Renovation)

Journey person

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$58.83**

Supplemental Benefit Rate per Hour: **\$30.10**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:00 P.M.) is to be paid at time and one half the regular rate. However, the employer may establish one (1) or two (2) shifts starting at or after 4:00 P.M. to be paid at the regular hourly rate plus a 10% differential.

(Bricklayer District Council)

ROOFER

Roofer

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$45.25**

Supplemental Benefit Rate per Hour: **\$37.56**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential. There must be a first shift to work the second shift, and a second shift to work the third shift. All other work outside the regular work day (an eight hour workday between the hours of 5:00 A.M. and 4:00 P.M.) is to be paid at time and one half the regular rate.

(Local #8)

SHEET METAL WORKER

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Sheet Metal Worker

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$52.10**

Supplemental Benefit Rate per Hour: **\$55.18**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Sheet Metal Worker - Fan Maintenance

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$41.68**

Supplemental Benefit Rate per Hour: **\$55.18**

Sheet Metal Worker - Duct Cleaner

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$19.12**

Supplemental Benefit Rate per Hour: **\$12.01**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate.

Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

(Local #28)

**SHEET METAL WORKER - SPECIALTY
(Decking & Siding)**

Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$49.05**

Supplemental Benefit Rate per Hour: **\$27.76**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

(Local #28)

SHIPYARD WORKER

Shipyard Mechanic - First Class

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$28.85**

Supplemental Benefit Rate per Hour: **\$3.93**

Shipyard Mechanic - Second Class

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.07**

Supplemental Benefit Rate per Hour: **\$3.79**

Shipyard Laborer - First Class

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.48**

Supplemental Benefit Rate per Hour: **\$3.77**

Shipyard Laborer - Second Class

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$17.93**

Supplemental Benefit Rate per Hour: **\$3.78**

Shipyard Dockhand - First Class

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.15**

Supplemental Benefit Rate per Hour: **\$3.70**

Shipyard Dockhand - Second Class

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$18.04**

Supplemental Benefit Rate per Hour: **\$3.61**

Overtime Description

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

New Year's Day
Martin Luther King Jr. Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Based on Survey Data

SIGN ERECTOR

(Sheet Metal, Plastic, Electric, and Neon)

Sign Erector

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$53.79**

Supplemental Benefit Rate per Hour: **\$59.56**

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Time and one half the regular hourly rate is to be paid for all hours worked outside the regular workday either (7:00 A.M. through 2:30 P.M.) or (8:00 A.M. through 3:30 P.M.)

(Local #137)

STEAMFITTER

Steamfitter

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$61.30**

Supplemental Benefit Rate per Hour: **\$59.89**

Supplemental Note: Overtime supplemental benefit rate: \$119.04

Steamfitter -Temporary Services

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$46.59**

Supplemental Benefit Rate per Hour: **\$48.70**

Overtime Description

Double time after a 7 hour day except for Temporary Services.

Overtime

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

May be performed outside of the regular workday except Saturday, Sunday and Holidays. When shift work is performed the wage rate for regular time worked is a 15% percent premium on wage and 15% percent premium on supplemental benefits.

Local 638

STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$43.85**

Supplemental Benefit Rate per Hour: **\$19.96**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Independence Day

Labor Day

Veteran's Day

Thanksgiving Day

Christmas Day

Double time and one half the regular rate for work on the following holiday(s).

Martin Luther King Jr. Day

President's Day

Memorial Day

Columbus Day

Paid Holidays

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

(Local #638-B)

STONE MASON - SETTER

Stone Mason - Setter

(Assisted by Derrickperson and Rigger)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$57.16**

Supplemental Benefit Rate per Hour: **\$50.17**

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

Shift Rates

For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

TAPER

Drywall Taper

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$48.47**

Supplemental Benefit Rate per Hour: **\$30.01**

Overtime

Time and one half the regular rate after a 7 hour day.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

Paid Holidays

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

(Local #1974)

TELECOMMUNICATION WORKER

(Install/maintain/repair telecommunications cables carrying data, video, and/or voice except for installation on building construction/alteration/renovation projects.)

Telecommunication Worker

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.03**

Supplemental Benefit Rate per Hour: **\$23.15**

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$22.84 for Staten Island only.

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Lincoln's Birthday

Washington's Birthday

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Paid Holidays

New Year's Day
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

Shift Rates

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

Vacation

After 6 months.....one week.
After 12 months but less than 7 years.....two weeks.
After 7 or more but less than 15 years.....three weeks.
After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$44.40**
Supplemental Benefit Rate per Hour: **\$35.56**

Overtime

Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TILE LAYER - SETTER

Tile Layer - Setter

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$57.41**

Supplemental Benefit Rate per Hour: **\$40.11**

Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

Timberperson

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$53.05**

Supplemental Benefit Rate per Hour: **\$53.94**

Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate. Benefits for off-shift work shall be paid at the straight time rate.

(Local #1536)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$68.58**

Supplemental Benefit Rate per Hour: **\$60.19**

Tunnel Workers (Compressed Air Rates)

Includes shield driven liner plate portions or solidification portions work (8 hour shift) during excavation phase.

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$66.14**

Supplemental Benefit Rate per Hour: **\$58.29**

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$65.04**

Supplemental Benefit Rate per Hour: **\$57.14**

Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$63.74**

Supplemental Benefit Rate per Hour: **\$56.20**

Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$63.74**

Supplemental Benefit Rate per Hour: **\$56.20**

Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$56.04**

Supplemental Benefit Rate per Hour: **\$52.83**

Blasters (Free Air Rates)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$65.41**

Supplemental Benefit Rate per Hour: **\$57.80**

Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$62.58**

Supplemental Benefit Rate per Hour: **\$55.38**

All Others (Free Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$57.84**

Supplemental Benefit Rate per Hour: **\$51.26**

Microtunneling (Free Air Rates)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$50.06**

Supplemental Benefit Rate per Hour: **\$44.30**

Overtime Description

For work performed during excavation and primary concrete tunnel lining phases - Double time the regular rate after an 8 hour day and Saturday, Sunday and on the following holiday(s) listed below.

For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 7 hour day, Saturday, Sunday and double time the regular rate for work on the following holiday(s) listed below.

For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.

For work not listed above - Time and one half the regular rate after an 8 hour day and Saturday and double time the regular rate on Sunday and on the following holiday(s) listed below.

Paid Holidays

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

(Local #147)

UTILITY LOCATOR

(Locate & mark underground utilities for street excavation.)

Utility Locator (Year 7 and above)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$31.56**

Supplemental Benefit Rate per Hour: **\$1.43**

Utility Locator (Year 5 - 6)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.85**

Supplemental Benefit Rate per Hour: **\$1.43**

Utility Locator (Year 4)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$21.54**

Supplemental Benefit Rate per Hour: **\$1.43**

Utility Locator (Year 3)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$20.30**

Supplemental Benefit Rate per Hour: **\$1.43**

Utility Locator (Year 2)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$19.13**

Supplemental Benefit Rate per Hour: **\$1.43**

Utility Locator (Year 1)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$18.04**

Supplemental Benefit Rate per Hour: **\$1.43**

Utility Locator (Up to 1 year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$17.00**

Supplemental Benefit Rate per Hour: **\$1.43**

Supplemental Note: No benefits for the first 90 days of employment.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION WORKER PREVAILING WAGE SCHEDULE

Overtime

Time and one half the regular rate for work on the following holiday(s).
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays

New Year's Day
Memorial Day
Independence Day
Thanksgiving Day
Christmas Day

Shift Rates

10% shift differential to employees working any shift starting between noon and 5 AM.

Vacation

For up to 1 year 0 hours
For year 1 - 2 48 hours per year
For year 3 - 9 96 hours per year
For year 10 or more 144 hours per year

Sick Days:

For up to 1 year employee receives 40 hours paid sick leave.
For year 1 employee earns 2 hours of paid sick leave for every 100 overtime hours worked.
For year 2 - 9 years employee earns 4 hours of paid sick leave for every 100 overtime hours worked.
For year 10 or more employee earns 6 hours of paid sick leave for every 100 overtime hours worked.

(C.W.A.)

WELDER

**TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE
PERFORMING THE WORK.**

OFFICE OF THE COMPTROLLER

CITY OF NEW YORK

**CONSTRUCTION APPRENTICE
PREVAILING WAGE SCHEDULE**

Pursuant to Labor Law § 220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant and registered with the New York State Department of Labor, may be paid at the apprentice rates in this schedule. Apprentices who are not so registered must be paid as journey persons in accordance with the trade classification of the work they actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

TABLE OF CONTENTS

<u>CLASSIFICATION</u>	<u>PAGE</u>
BOILERMAKER.....	3
BRICKLAYER.....	4
CARPENTER.....	5
CARPENTER - HIGH RISE CONCRETE FORMS	5
CEMENT AND CONCRETE WORKER.....	6
CEMENT MASON.....	7
DERRICKPERSON & RIGGER (STONE).....	7
DOCKBUILDER/PILE DRIVER.....	8
ELECTRICIAN	9
ELEVATOR CONSTRUCTOR	10
ELEVATOR REPAIR & MAINTENANCE.....	11
ENGINEER	12
ENGINEER - OPERATING	13
FLOOR COVERER.....	14
GLAZIER	14
HAZARDOUS MATERIAL HANDLER.....	15
HEAT & FROST INSULATOR	16
HOUSE WRECKER	17
IRON WORKER - ORNAMENTAL.....	17
IRON WORKER - STRUCTURAL.....	18
LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON).....	19
MARBLE MECHANICS	20
MASON TENDER	21
MASON TENDER (INTERIOR DEMOLITION WORKER).....	22
METALLIC LATHER.....	23
MILLWRIGHT	23
PAINTER	24
PAINTER - LINE STRIPING (ROADWAY).....	25
PAINTER - METAL POLISHER	25
PAINTER - STRUCTURAL STEEL.....	26
PAVER AND ROADBUILDER	26
PLASTERER	27
PLASTERER - TENDER.....	28
PLUMBER	28
POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER	29
ROOFER.....	30
SHEET METAL WORKER.....	31
SIGN ERECTOR.....	32
STEAMFITTER	33
STEAMFITTER - REFRIGERATION & AIR CONDITIONER.....	34
STONE MASON - SETTER.....	35
TAPER.....	36
TILE LAYER - SETTER.....	36
TIMBERPERSON	38

BOILERMAKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Boilermaker (First Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$33.57

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$35.54

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$37.51

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$39.48

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 85% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$41.45

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$43.42

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$45.39

(Local #5)

BRICKLAYER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Bricklayer (First 750 Hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 50% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$23.85

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$23.85

Bricklayer (Third 750 Hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$23.85

Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$23.85

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 90% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$23.85

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 95% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$23.85

(Bricklayer District Council)

CARPENTER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Carpenter (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour For Building Apprentice: \$19.80

Supplemental Benefit Rate Per Hour For Building Apprentice: \$16.85

Wage Rate Per Hour For Heavy Apprentice: \$24.60

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$36.26

Carpenter (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour For Building Apprentice: \$22.80

Supplemental Benefit Rate Per Hour For Building Apprentice: \$18.35

Wage Rate Per Hour For Heavy Apprentice: \$30.20

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$36.26

Carpenter (Third Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour For Building Apprentice: \$27.05

Supplemental Benefit Rate Per Hour For Building Apprentice: \$21.95

Wage Rate Per Hour For Heavy Apprentice: \$38.58

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$36.26

Carpenter (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour For Building Apprentice: \$34.93

Supplemental Benefit Rate Per Hour For Building Apprentice: \$23.95

Wage Rate Per Hour For Heavy Apprentice: \$46.97

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$36.26

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS

(Ratio of Apprentice to Journeyman: 1 to 1, 2 to 5)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Carpenter - High Rise (First Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$18.27
Supplemental Benefit Rate per Hour: \$16.55

Carpenter - High Rise (Second Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$24.70
Supplemental Benefit Rate per Hour: \$17.68

Carpenter - High Rise (Third Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$31.28
Supplemental Benefit Rate per Hour: \$17.81

Carpenter - High Rise (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$38.90
Supplemental Benefit Rate per Hour: \$17.96

(Carpenters District Council)

**CEMENT AND CONCRETE WORKER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

Cement & Concrete Worker (First 1333 hours)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 53% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$14.79

Cement & Concrete Worker (Second 1333 hours)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 69% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$19.72

Cement & Concrete Worker (Last 1334 hours)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 85% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$21.30

(Cement Concrete Workers District Council)

CEMENT MASON
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Cement Mason (First Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$19.92
Supplemental Benefit Rate per Hour: \$15.61

Cement Mason (Second Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$24.82
Supplemental Benefit Rate per Hour: \$15.91

Cement Mason (Third Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: \$30.22
Supplemental Benefit Rate per Hour: \$16.02

(Local #780)

DERRICKPERSON & RIGGER (STONE)
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Derrickperson & Rigger (stone) - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: 50% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Derrickperson & Rigger (stone) - Second Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

DOCKBUILDER/PILE DRIVER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$24.60
Supplemental Benefit Rate Per Hour: \$36.26

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$30.20
Supplemental Benefit Rate Per Hour: \$36.26

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$38.58
Supplemental Benefit Rate Per Hour: \$36.26

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$46.97

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate Per Hour: \$36.26

(Carpenters District Council)

ELECTRICIAN

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Electrician (First Term: 0-6 Months)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$18.00**

Supplemental Benefit Rate per Hour: **\$15.68**

Overtime Supplemental Rate Per Hour: \$16.88

Electrician (First Term: 7-12 Months)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$18.50**

Supplemental Benefit Rate per Hour: **\$15.94**

Overtime Supplemental Rate Per Hour: \$17.17

Electrician (Second Term: 0-6 Months)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$19.50**

Supplemental Benefit Rate per Hour: **\$16.47**

Overtime Supplemental Rate Per Hour: \$17.76

Electrician (Second Term: 7-12 Months)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$20.50**

Supplemental Benefit Rate per Hour: **\$16.99**

Overtime Supplemental Rate Per Hour: \$18.35

Electrician (Third Term: 0-6 Months)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$21.50**

Supplemental Benefit Rate per Hour: **\$17.52**

Overtime Supplemental Rate Per Hour: \$18.94

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Electrician (Third Term: 7-12 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$22.50**
Supplemental Benefit Rate per Hour: **\$18.04**
Overtime Supplemental Rate Per Hour: **\$19.53**

Electrician (Fourth Term: 0-6 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$23.50**
Supplemental Benefit Rate per Hour: **\$18.56**
Overtime Supplemental Rate Per Hour: **\$20.12**

Electrician (Fourth Term: 7-12 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$25.50**
Supplemental Benefit Rate per Hour: **\$19.61**
Overtime Supplemental Rate Per Hour: **\$21.30**

Electrician (Fifth Term: 0-12 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$26.75**
Supplemental Benefit Rate per Hour: **\$22.88**
Overtime Supplemental Rate Per Hour: **\$24.57**

Electrician (Fifth Term: 13-18 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$31.25**
Supplemental Benefit Rate per Hour: **\$25.30**
Overtime Supplemental Rate Per Hour: **\$27.28**

Overtime Description

Overtime Wage paid at time and one half the regular rate

(Local #3)

ELEVATOR CONSTRUCTOR

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Elevator (Constructor) - First Year

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$33.38

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$34.64

Elevator (Constructor) - Second Year

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: \$33.96

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: \$35.24

Elevator (Constructor) - Third Year

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$35.10

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$36.43

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: \$36.24

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: \$37.63

(Local #1)

ELEVATOR REPAIR & MAINTENANCE
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Per Hour: \$33.33

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Per Hour: \$34.59

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Benefit Per Hour: \$33.90

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Benefit Per Hour: \$35.18

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Per Hour: \$35.03

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Per Hour: \$36.37

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2022 - 3/16/2023
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: \$36.17

Effective Period: 3/17/2023 - 6/30/2023
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: \$37.55

(Local #1)

ENGINEER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Engineer - First Year

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$27.47**
Supplemental Benefit Rate per Hour: **\$30.97**

Engineer - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$34.34**
Supplemental Benefit Rate per Hour: **\$30.97**

Engineer - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$37.77**
Supplemental Benefit Rate per Hour: **\$30.97**

Engineer - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$41.21**
Supplemental Benefit Rate per Hour: **\$30.97**

(Local #15)

ENGINEER - OPERATING
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Operating Engineer - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 40% of Operating Engineer - Road & Heavy Construction V's Rate
Supplemental Benefit Per Hour: \$24.80

Operating Engineer - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 50% of Operating Engineer - Road & Heavy Construction V's Rate
Supplemental Benefit Per Hour: \$24.80

Operating Engineer - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 60% of Operating Engineer - Road & Heavy Construction V's Rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Supplemental Benefit Per Hour: \$24.80

(Local #14)

FLOOR COVERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Floor Coverer (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$24.80**

Supplemental Benefit Rate per Hour: **\$16.83**

Floor Coverer (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$27.80**

Supplemental Benefit Rate per Hour: **\$18.33**

Floor Coverer (Third Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$32.05**

Supplemental Benefit Rate per Hour: **\$21.93**

Floor Coverer (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$39.93**

Supplemental Benefit Rate per Hour: **\$23.93**

(Carpenters District Council)

GLAZIER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Glazier (First Year)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Glazier (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Glazier (Third Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Glazier (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #1281)

HAZARDOUS MATERIAL HANDLER
(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)

Handler (First 1000 Hours)

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$20.00**

Supplemental Benefit Rate per Hour: **\$14.25**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$20.00**

Supplemental Benefit Rate per Hour: **\$14.75**

Handler (Second 1000 Hours)

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$21.00**

Supplemental Benefit Rate per Hour: **\$14.25**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$21.00**

Supplemental Benefit Rate per Hour: **\$14.75**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Handler (Third 1000 Hours)

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$24.00**

Supplemental Benefit Rate per Hour: **\$14.25**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$24.00**

Supplemental Benefit Rate per Hour: **\$14.75**

Handler (Fourth 1000 Hours)

Effective Period: 7/1/2022 - 7/3/2022

Wage Rate per Hour: **\$26.00**

Supplemental Benefit Rate per Hour: **\$14.25**

Effective Period: 7/4/2022 - 6/30/2023

Wage Rate per Hour: **\$26.00**

Supplemental Benefit Rate per Hour: **\$14.75**

(Local #78)

HEAT & FROST INSULATOR

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Heat & Frost Insulator (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 70% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

(Local #12)

HOUSE WRECKER
(TOTAL DEMOLITION)
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

House Wrecker - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$20.80**
Supplemental Benefit Rate per Hour: **\$10.67**

House Wrecker - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$22.75**
Supplemental Benefit Rate per Hour: **\$10.67**

House Wrecker - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$24.25**
Supplemental Benefit Rate per Hour: **\$10.67**

House Wrecker - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$26.75**
Supplemental Benefit Rate per Hour: **\$10.67**

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Iron Worker (Ornamental) - First Year

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$20.63**
Supplemental Benefit Rate per Hour: **\$17.61**

Iron Worker (Ornamental) - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$24.22**
Supplemental Benefit Rate per Hour: **\$18.86**

Iron Worker (Ornamental) - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$27.80**
Supplemental Benefit Rate per Hour: **\$20.12**

Iron Worker (Ornamental) - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$31.38**
Supplemental Benefit Rate per Hour: **\$21.38**

(Local #580)

IRON WORKER - STRUCTURAL
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$28.97**
Supplemental Benefit Rate per Hour: **\$58.62**

Iron Worker (Structural) - 7- 18 Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$29.57**
Supplemental Benefit Rate per Hour: **\$58.62**

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$30.18**

Supplemental Benefit Rate per Hour: **\$58.62**

(Local #40 and #361)

LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON)

(Ratio Apprentice to Journeyman: 1 to 1, 1 to 3)

Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - First 1000 hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 50% of Journeyman's rate

Supplemental Rate Per Hour: \$50.43

Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Second 1000 hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Rate Per Hour: \$50.43

Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Third 1000 hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Rate Per Hour: \$50.43

Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 90% of Journeyman's rate

Supplemental Rate Per Hour: \$50.43

(Local #731)

MARBLE MECHANICS

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Cutters & Setters - Second 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 45% of Journeyman's rate

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

Cutters & Setters - Fourth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 55% of Journeyman's rate

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 65% of Journeyman's rate

Cutters & Setters - Seventh 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 70% of Journeyman's rate

Cutters & Setters - Eighth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 75% of Journeyman's rate

Cutters & Setters - Ninth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Cutters & Setters - Tenth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

Polishers & Finishers - First 900 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Polishers & Finishers - Second 900 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

Polishers & Finishers - Third 900 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

MASON TENDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Mason Tender - First Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$20.95**

Supplemental Benefit Rate per Hour: **\$10.82**

Mason Tender - Second Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.90**

Supplemental Benefit Rate per Hour: **\$10.82**

Mason Tender - Third Year

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$24.40**
Supplemental Benefit Rate per Hour: **\$10.82**

Mason Tender - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$26.90**
Supplemental Benefit Rate per Hour: **\$10.82**

(Local #79)

MASON TENDER (INTERIOR DEMOLITION WORKER)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Mason Tender (Interior Demolition) - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$20.70**
Supplemental Benefit Rate per Hour: **\$10.82**

Mason Tender (Interior Demolition) - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$22.65**
Supplemental Benefit Rate per Hour: **\$10.82**

Mason Tender (Interior Demolition) - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$24.15**
Supplemental Benefit Rate per Hour: **\$10.82**

Mason Tender (Interior Demolition) - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$26.65**
Supplemental Benefit Rate per Hour: **\$10.82**

(Local #79)

METALLIC LATHER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Metallic Lather (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$22.55**

Supplemental Benefit Rate per Hour: **\$17.87**

Metallic Lather (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$23.60**

Supplemental Benefit Rate per Hour: **\$16.87**

Metallic Lather (Third Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$24.60**

Supplemental Benefit Rate per Hour: **\$15.92**

Metallic Lather (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$37.18**

Supplemental Benefit Rate per Hour: **\$21.82**

(Local #46)

MILLWRIGHT

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Millwright (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$31.24**

Supplemental Benefit Rate per Hour: **\$35.94**

Millwright (Second Year)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$36.69**
Supplemental Benefit Rate per Hour: **\$39.64**

Millwright (Third Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$42.14**
Supplemental Benefit Rate per Hour: **\$43.99**

Millwright (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$53.04**
Supplemental Benefit Rate per Hour: **\$50.75**

(Local #740)

PAINTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painter - Brush & Roller - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$17.20**
Supplemental Benefit Rate per Hour: **\$17.42**

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$21.50**
Supplemental Benefit Rate per Hour: **\$22.41**

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$25.80**
Supplemental Benefit Rate per Hour: **\$26.46**

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$34.40**

Supplemental Benefit Rate per Hour: **\$34.15**

(District Council of Painters)

PAINTER - LINE STRIPING (ROADWAY)
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Painter - Line Striping (Roadway) - First Year (Minimum 1000 hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$30.36**

Supplemental Benefit Rate per Hour: **\$15.27**

Painter - Line Striping (Roadway) - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$32.00**

Supplemental Benefit Rate per Hour: **\$15.27**

(Local #1010)

PAINTER - METAL POLISHER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Metal Polisher (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$16.00**

Supplemental Benefit Rate per Hour: **\$7.96**

New Construction - Wage Rate Per Hour: **\$16.39**

Scaffold Over 34 Feet - Wage Rate Per Hour: **\$18.50**

Metal Polisher (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$17.00**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$7.96**
New Construction - Wage Rate Per Hour: **\$17.44**
Scaffold Over 34 Feet - Wage Rate Per Hour: **\$19.50**

Metal Polisher (Third Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$18.00**
Supplemental Benefit Rate per Hour: **\$7.96**
New Construction - Wage Rate Per Hour: **\$18.54**
Scaffold Over 34 Feet - Wage Rate Per Hour: **\$20.50**

(Local 8A-28)

PAINTER - STRUCTURAL STEEL
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Painters - Structural Steel (First Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

Painters - Structural Steel (Second Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

Painters - Structural Steel (Third Year)

Effective Period: 7/1/2022 - 6/30/2023
Wage and Supplemental Rate Per Hour: 80% of Journeyman's rate

(Local #806)

PAVER AND ROADBUILDER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Paver and Roadbuilder - First Year (Minimum 1000 hours)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$29.86**

Supplemental Benefit Rate per Hour: **\$24.60**

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$32.00**

Supplemental Benefit Rate per Hour: **\$24.60**

(Local #1010)

PLASTERER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

(Each Term is 800 Hours.)

Plasterer - First Term

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 55% of Journeyman's rate

Supplemental Rate Per Hour: \$17.48

Plasterer - Second Term

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Rate Per Hour: \$18.63

Plasterer - Third Term

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Rate Per Hour: \$20.93

Plasterer - Fourth Term

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Rate Per Hour: \$22.10

(Local #262)

PLASTERER - TENDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plasterer Tender - First Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$21.45**

Supplemental Benefit Rate per Hour: **\$10.32**

Plasterer Tender - Second Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$23.40**

Supplemental Benefit Rate per Hour: **\$10.32**

Plasterer Tender - Third Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$24.90**

Supplemental Benefit Rate per Hour: **\$10.32**

Plasterer Tender - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$27.40**

Supplemental Benefit Rate per Hour: **\$10.32**

(Local #79)

PLUMBER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plumber - First Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$16.78**

Supplemental Benefit Rate per Hour: **\$5.43**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$19.78**

Supplemental Benefit Rate per Hour: **\$6.43**

Plumber - Second Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$28.99**

Supplemental Benefit Rate per Hour: **\$21.95**

Plumber - Third Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$31.09**

Supplemental Benefit Rate per Hour: **\$21.95**

Plumber - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$33.94**

Supplemental Benefit Rate per Hour: **\$21.95**

Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$35.34**

Supplemental Benefit Rate per Hour: **\$21.95**

Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.41**

Supplemental Benefit Rate per Hour: **\$21.95**

(Plumbers Local #1)

**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,
STEAMBLASTER**

(Exterior Building Renovation)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$29.86**

Supplemental Benefit Rate per Hour: **\$15.00**

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$33.74**

Supplemental Benefit Rate per Hour: **\$20.05**

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$39.02**

Supplemental Benefit Rate per Hour: **\$23.80**

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$47.05**

Supplemental Benefit Rate per Hour: **\$24.80**

(Bricklayer District Council)

ROOFER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

Roofer - First Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 35% of Journeyman's rate

Supplemental Benefit Rate Per Hour: **\$3.82**

Roofer - Second Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 50% of Journeyman's rate

Supplemental Benefit Rate Per Hour: **\$18.92**

Roofer - Third Year

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$22.64

Roofer - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$28.24

(Local #8)

SHEET METAL WORKER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Sheet Metal Worker (0-6 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 25% of Journeyman's rate
Supplemental Rate Per Hour: \$6.84

Sheet Metal Worker (7-18 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 35% of Journeyman's rate
Supplemental Rate Per Hour: \$20.20

Sheet Metal Worker (19-30 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 45% of Journeyman's rate
Supplemental Rate Per Hour: \$27.48

Sheet Metal Worker (31-36 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$32.52

Sheet Metal Worker (37-42 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$32.52

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Sheet Metal Worker (43-48 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$40.08

Sheet Metal Worker (49-54 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$40.08

Sheet Metal Worker (55-60 Months)

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: \$45.12

(Local #28)

SIGN ERECTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Rate Per Hour: \$17.09

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: \$19.39

Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: \$21.70

Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$24.02

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: \$32.50

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: \$35.35

Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$39.00

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$41.95

Sign Erector - Fifth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: \$44.89

Sign Erector - Sixth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: \$47.80

(Local #137)

STEAMFITTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Steamfitter - First Year

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

Steamfitter - Second Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

Steamfitter - Third Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate and Supplemental Rate per Hour: 60% of Journeyperson's rate.

Steamfitter - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate and Supplemental Rate Per Hour: 70% of Journeyperson's rate.

Steamfitter - Fifth Year

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate and Supplemental Rate Per Hour: 80% of Journeyperson's rate.

(Local #638)

**STEAMFITTER - REFRIGERATION & AIR CONDITIONER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

Refrigeration & Air Conditioner (First Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$21.23**

Supplemental Benefit Rate per Hour: **\$13.29**

Refrigeration & Air Conditioner (Second Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$25.63**

Supplemental Benefit Rate per Hour: **\$14.57**

Refrigeration & Air Conditioner (Third Year)

Effective Period: 7/1/2022 - 6/30/2023

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$29.85**

Supplemental Benefit Rate per Hour: **\$15.91**

Refrigeration & Air Conditioner (Fourth Year)

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate per Hour: **\$36.05**

Supplemental Benefit Rate per Hour: **\$17.72**

(Local #638-B)

STONE MASON - SETTER

(Ratio Apprentice of Journeyman: 1 to 1, 1 to 2)

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Third 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Fourth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Fifth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage Rate Per Hour: 90% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Sixth 750 Hours

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: 100% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

(Bricklayers District Council)

TAPER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Drywall Taper - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$20.97**
Supplemental Benefit Rate per Hour: **\$14.25**

Drywall Taper - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$24.24**
Supplemental Benefit Rate per Hour: **\$21.26**

Drywall Taper - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$29.08**
Supplemental Benefit Rate per Hour: **\$23.01**

Drywall Taper - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate per Hour: **\$38.78**
Supplemental Benefit Rate per Hour: **\$26.51**

(Local #1974)

TILE LAYER - SETTER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 35% of Journeyperson's rate

Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour 40% of Journeyperson's rate

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Tile Layer - Setter - Fifth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Tile Layer - Setter - Seventh 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Tile Layer - Setter - Eighth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Tile Layer - Setter - Ninth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

Tile Layer - Setter - Tenth 750 Hours

Effective Period: 7/1/2022 - 6/30/2023

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

(Local #7)

TIMBERPERSON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Timberperson - First Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$22.42
Supplemental Rate Per Hour: \$36.22

Timberperson - Second Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$27.53
Supplemental Rate Per Hour: \$36.22

Timberperson - Third Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$35.18
Supplemental Rate Per Hour: \$36.22

Timberperson - Fourth Year

Effective Period: 7/1/2022 - 6/30/2023
Wage Rate Per Hour: \$42.84
Supplemental Rate Per Hour: \$36.22

(Local #1536)



Leonard A. Mancusi
SENIOR ASSISTANT COMPTROLLER

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET ROOM 1120
NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-3622
FAX NUMBER: (212) 669-8499

ALAN G. HEVESI
COMPTROLLER

MEMORANDUM

November 6, 2000

To Agency Chief Contracting Officers

From: Leonard A. Mancusi

Re: Security at Construction Sites

.....

Prior to the enactment of Administrative Code §6-109, security guards on construction sites were not subject to prevailing wages. Security guards under the New York State labor law are covered under §230 which provides that prevailing wages are to be paid for security guards in existing buildings. §6-109 of the Administrative Code which was enacted in 1996 closed this loophole by including all security guards working pursuant to a city contract as a prevailing wage trade.

Although some construction contract boilerplate language has been amended to include §6-109, sub-contractors performing security services have advised us that they were not aware of this provision and, since traditionally, security guards were not a covered trade on construction sites, and they were not advised by a prime contractor that they would have to pay prevailing wages, they have not been doing so.

To avoid the possibility of issuing stop payments against prime contractors for the failure of their security service sub-contractors to pay

prevailing wages, we suggest that you write to all your existing security guard sub-contractors and their primes and in the future, upon approval of a security guard sub-contractor, advise the contractors of their obligation to pay prevailing wages under §6-109 of the Administrative Code.

As always, your cooperation is appreciated.

LAM:er
ACCO.SECURITY AT SITES



**Department of
Design and
Construction**

**DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN**

VOLUME 2 OF 3

Contractor

Dated _____, 20__

**APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY**

Acting Corporation Counsel

Dated _____, 20__



**Department of
Design and
Construction**

DIVISION OF INFRASTRUCTURE

VOLUME 2 OF 3

PROJECT ID: HBPED800Q

**RECONSTRUCTION OF
TIDE GATE BRIDGE OVER FLUSHING CREEK**

B.I.N. 2-27069-0

TOGETHER WITH ALL WORK INCIDENTAL THERETO

**BOROUGH OF QUEENS
CITY OF NEW YORK**

Contractor

Dated _____, 20__

**APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY**

Acting Corporation Counsel

Dated _____, 20__



**Department of
Design and
Construction**

DIVISION OF INFRASTRUCTURE

VOLUME 2 OF 3

PROJECT ID: HBPED800Q

**RECONSTRUCTION OF
TIDE GATE BRIDGE OVER FLUSHING CREEK**

B.I.N. 2-27069-0

TOGETHER WITH ALL WORK INCIDENTAL THERETO

**BOROUGH OF QUEENS
CITY OF NEW YORK**

Contractor

Dated _____, 20__

**APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY**

Acting Corporation Counsel

CL 12/13/22

Dated December 13, 2022



**Department of
Design and
Construction**

**THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND
CONSTRUCTION
DIVISION OF INFRASTRUCTURE**
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY, 11101
TEL: 718.391.1000
WEB: www.nyc.gov/ddc

TO BE FILLED IN BY THE BIDDER:

BIDDER'S NAME:

BID SECURITY (CIRCLE ONE):
BID BOND / CERTIFIED CHECK

NUMBER OF ADDENDUMS RECEIVED
AND ATTACHED TO BID:
_____ ADDENDUMS

DDC CLIENT AGENCY:
DEPARTMENT OF TRANSPORTATION
PREPARED BY:
URS CORPORATION
DATE PREPARED:
AUGUST 16, 2022



VOLUME 3 OF 3

FOR FURNISHING ALL LABOR AND MATERIALS
NECESSARY AND REQUIRED FOR:

PROJECT ID: HBPED800Q

**SCHEDULE A
SPECIFICATIONS AND
REVISIONS TO STANDARD
SPECIFICATIONS**

**RECONSTRUCTION OF
TIDE GATE BRIDGE OVER FLUSHING CREEK**

BIN 2-27069-0

TOGETHER WITH ALL WORK INCIDENTAL THERETO

**BOROUGH OF QUEENS
CITY OF NEW YORK**

VOLUME 3 OF 3

TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGES</u>
SPECIFICATIONS AND STANDARDS OF NEW YORK CITY		1 OF 1
SCHEDULE A	GENERAL CONDITIONS TO CONSTRUCTION CONTRACT	SA-1 to SA-12
R - PAGES	REVISIONS TO STANDARD SPECIFICATIONS	R-1
I - PAGES	NEW SECTIONS	I-1 to I-91
SSR – PAGES	NYSDOT SPECIFICATION REFERENCE PAGES	SSRP-1 TO SSRP - 4
S-PAGES	SPECIAL PROVISION PAGES	S-1 to S- 19
FEMA-PAGES	FEDERAL EMERGENCY MANAGEMENT AGENCY PROJECTS AND UNIFORM FEDERAL CONTRACT PROVISIONS RIDER FOR FEDERALLY FUNDED PROCUREMENT CONTRACTS	FEMA-1 to FEMA-2
SW - PAGES	SEWER AND WATER MAIN SPECIFICATIONS	SW-1 to SW-19
ASB-PAGES	SPECIFICATIONS FOR ABATMENT OF ASBESTOS CONTAINING MATERIALS	ASB-1 to ASB-166
HAZ – PAGES	SUPPLEMENTAL DOCUMENTATION FOR USE WITH SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS	HAZ-1 TO HAZ-627
EL PAGES	SPECIFICATIONS FOR THE SPECIALTY ELECTRICAL WORKS	EL-1 TO EL-85
JB – PAGES	JOINT BID SECTION	JB-1 to JB-G3

(NO TEXT ON THIS PAGE)

SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following specifications and standards are incorporated into the Contract Documents by reference as though fully set forth herein.

1. Standard Specifications and Drawings for New York City Department of Transportation (NYCDOT) are available:
Online at: <http://www1.nyc.gov/site/ddc/resources/publications.page>
 - a. NYC DOT Standard Highway Specifications
 - b. NYC DOT Standard Details of ConstructionOnline at: <https://www1.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec>
 - c. NYC DOT Division of Street Lighting Standard Drawings
 - d. NYC DOT Standard Specifications for Traffic Signals
 - e. NYC DOT Standard Drawings for Traffic SignalsFor purchase between 9:00 A.M. and 3:00 P.M. Bid Window, at 55 Water St., Ground Floor, NYC, N.Y. 10041. Tel. (212) 839-9435.
 - f. NYC DOT Division of Street Lighting Specifications
2. The 2010 Americans with Disabilities Act (ADA) Standards; available online at: <https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm>
3. The 2013 Public Rights-of-Way Accessibility Guidelines (PROWAG); available online at: <https://www.access-board.gov/files/prowag/PROW-SUP-SNPRM-2013.pdf>
4. Standard Specifications and Drawings for New York City Department of Environmental Protection (NYCDEP) are available online at: <http://www1.nyc.gov/site/ddc/resources/publications.page>
 - a. NYC DEP Standard Sewer and Water Main Specifications, August 8, 2022
 - b. NYC DEP Instructions to Architect/Engineers Specifications for Concrete, January 1992
 - c. NYC DEP General Specification 11-Concrete, November 1991
 - d. NYC DEP Sewer Design Standards, August 2018
 - e. NYC DEP Water Main Standard Drawings, December 2020
 - f. Specifications for Trunk Main Work, July 2014
 - g. Standard Green Infrastructure Specifications September 1,2021
5. Standard Design and Guidelines for Green Infrastructure Practices, latest version, available only online at: <https://www1.nyc.gov/assets/dep/downloads/pdf/water/stormwater/green-infrastructure/green-infrastructure-standard-designs.pdf>
6. Standard Specifications and Drawings for New York City Fire Department Communications facilities of New York City are available online at <https://www1.nyc.gov/assets/fdny/downloads/pdf/about/fdny-plant-operations-standard-drawings-specifications.pdf> or for pick up from the FDNY Facilities Management Bureau, Plant Operations Engineering, 316 Sgt. Beers Avenue Cluster 1 Box 16, Fort Totten, N.Y. 11359. Contact: Mr. Ed Durkin, Tel. (718) 281-3933
7. Tree Planting Standards of the City of New York Parks & Recreation are available at the following Department of Parks & Recreation website: <http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf>
8. Standards and Specifications for Utility Joint Bid work are available online at <http://www1.nyc.gov/site/ddc/resources/publications.page>
 - a. CET SPECIFICATIONS AND SKETCHES, dated November 2010
 - b. JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN, Issued August 1, 2005

SCHEDULE A**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT
(INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)****PART I. REQUIRED INFORMATION**

<p align="center"><u>INFORMATION FOR BIDDERS SECTION 26 BID SECURITY</u></p> <p>The Contractor shall obtain a bid security in the amount indicated to the right.</p>	<p>Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more.</p> <p>Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount</p>
<p align="center"><u>INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS</u></p> <p>The Contractor shall obtain performance and payment bonds in the amount indicated to the right.</p>	<p>Required for contracts in the amount of \$1,000,000 or more.</p> <p>Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.</p>
<p align="center"><u>INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS</u></p> <p>The Contractor shall provide the safety personnel as indicated to the right.</p>	<ul style="list-style-type: none"> ■ Project Safety Representative ■ Dedicated, full-time Project Safety Manager
<p align="center"><u>CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION</u></p> <p>The Contractor shall substantially complete the Work in the number of calendar days indicated to the right.</p>	<p>See Page SA-4</p>
<p align="center"><u>CONTRACT ARTICLE 15 LIQUIDATED DAMAGES</u></p> <p>If the Contractor fails to substantially complete the Work within the time fixed for substantial completion plus authorized time extensions or if the Contractor, in the sole determination of the Commissioner, has abandoned the Work, the Contractor shall pay to the City the amount indicated to the right.</p>	<p>\$<u>7,000.00</u> for each consecutive calendar day over substantial completion time</p>
<p align="center"><u>CONTRACT ARTICLE 17. SUB-CONTRACTOR</u></p> <p>The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price indicated to the right.</p>	<p>Not to exceed <u>49</u> % of the Contract price</p>

<p style="text-align: center;"><u>CONTRACT ARTICLE 21.</u> <u>RETAINAGE</u></p> <p>The Commissioner shall deduct and retain until the substantial completion of the Work the percent value of the Work indicated to the right.</p>	<p><u>5 %</u> of the value of the Work</p>
<p style="text-align: center;"><u>CONTRACT ARTICLE 22.</u> <u>(Per Directions Below)</u></p>	<p>See pages SA-5 through SA-12</p>
<p style="text-align: center;"><u>CONTRACT ARTICLE 24.</u> <u>DEPOSIT GUARANTEE</u></p> <p>As security for the faithful performance of its obligations, the Contractor, upon filing its requisition for payment on Substantial Completion, shall deposit with the Commissioner a sum equal to the percentage of the Contract price indicated to the right.</p>	<p>1% of Contract price</p>
<p style="text-align: center;"><u>CONTRACT ARTICLE 24.</u> <u>PERIOD OF GUARANTEE</u></p> <p>Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.</p>	<p>Eighteen (18) Months, excluding Trees and Plants</p> <p>Twenty-four (24) Months for Trees and Plants</p>
<p style="text-align: center;"><u>CONTRACT ARTICLE 75.</u> <u>COMPENSATION TO BE PAID TO CONTRACTOR</u></p> <p>The City shall pay, and the Contractor shall accept in full consideration for the performance of the Contract, subject to additions and deductions as provided herein, the total sum shown in the column to the right, being the amount at which the Contract was awarded to the Contractor at a public letting thereof, based upon the Contractor's bid for the Contract.</p>	<p>Amount for which the Contract was Awarded:</p> <p>_____</p> <p>_____ Dollars</p> <p>(\$ _____)</p>
<p style="text-align: center;"><u>CONTRACT ARTICLE 79.</u> <u>PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT</u></p>	<p>See M/WBE Utilization Plan in the PASSPort Procurement M/WBE Considerations Section.</p>

<p style="text-align: center;"><u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 6.40</u> <u>LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE</u></p> <p>If the Contractor fails to satisfactorily provide the field office and all equipment specified in Section 6.40 - Engineer's Field Office, and/or if a cited deficiency exceed seventy-two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in Section 6.40.5, is not corrected.</p>	<p>\$ <u>500.00</u> for each calendar day of deficiency</p>
<p style="text-align: center;"><u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 6.70</u> <u>LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC</u></p>	<p>\$ <u>250.00</u> for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer.</p> <p>\$ <u>500.00</u> for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation.</p>
<p style="text-align: center;"><u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 7.13</u> <u>LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE</u></p> <p>If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of Section 7.13 - Maintenance of Site, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.</p>	<p>\$ <u>1,400.00</u> for each calendar day, for each occurrence</p>

Date for Substantial Completion (Reference: Article 14)

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is 1095 consecutive calendar days ("ccds").

The Final Contract Duration shall be the Base Contract Duration when a check mark is indicated before the word "NO", below, and shall be the Base Contract Duration adjusted by the table set forth below when a check mark is indicated before the word "YES", below.

YES NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

- (a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
- (b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

Month of Substantial Completion based on the Base Contract Duration	Number of Days of adjustment
January	150
February	120
March	90
April	60
May	30
June	0
July	0
August	0
September	0
October	0
November –December 15	0
December 16 – December 31	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS

Note: All certificate(s) of insurance submitted pursuant to Contract Article 22.3.3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the “Description of Operations” field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
<p>■ Commercial General Liability Art. 22.1.1</p>	<p>The minimum limits shall be \$ <u>3,000,000</u> per occurrence and \$ <u>6,000,000</u> per project aggregate applicable to this Contract. Additional Insureds: 1. City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37, 2. All person(s) or organization(s), if any, that Article 22.1.1(b) of the Contract requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity’s name, if known, or the entity’s title (e.g., Project Manager), 3. Con Edison 4. Verizon</p>

<ul style="list-style-type: none"> ■ Workers' Compensation Art. 22.1.2 ■ Disability Benefits Insurance Art. 22.1.2 ■ Employers' Liability Art. 22.1.2 ■ Jones Act Art. 22.1.3 ■ U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.3 	<p>Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.</p> <p>Note: The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance.</p> <p>Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law.</p> <p><input type="checkbox"/> Additional Requirements:</p>
<p><input type="checkbox"/> Builders' Risk Art. 22.1.4</p>	<p><input type="checkbox"/> Required: 100% of total bid amount</p> <p><input type="checkbox"/> Required: 100 % of total bid amount for Item(s):</p> <p>Contractor the Named Insured; the City both an Additional Insured and one of the loss payees as its interests may appear. If the Work does not involve construction of a new building or gut renovation work, the Contractor may provide an installation floater in lieu of Builders Risk insurance.</p> <p>Note: Builders Risk Insurance may terminate upon Substantial Completion of the Work in its entirety.</p>

<p><input checked="" type="checkbox"/> Commercial Auto Liability Art. 22.1.5</p>	<p>\$ <u>2,000,000</u> per accident combined single limit</p> <p>If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90</p> <p><input type="checkbox"/> Additional Insureds:</p> <p>1. City of New York, including its officials and employees</p>
<p><input checked="" type="checkbox"/> Contractors Pollution Liability Art. 22.1.6</p>	<p>\$ <u>5,000,000</u> per occurrence \$ <u>5,000,000</u> aggregate</p> <p><input checked="" type="checkbox"/> Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and 2. _____ 3. _____</p>
<p><input type="checkbox"/> Marine Protection and Indemnity Art. 22.1.7(a)</p>	<p>\$ _____ each occurrence \$ _____ aggregate</p> <p><input type="checkbox"/> Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and 2. _____ 3. _____</p>
<p><input type="checkbox"/> Hull and Machinery Insurance Art. 22.1.7(b)</p>	<p>\$ _____ per occurrence \$ _____ aggregate</p> <p><input type="checkbox"/> Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and 2. _____ 3. _____</p>

<p><input checked="" type="checkbox"/> Marine Pollution Liability Art. 22.1.7(c)</p>	<p>\$ <u>1,000,000</u> per occurrence \$ <u>1,000,000</u> aggregate</p> <p><input checked="" type="checkbox"/> Additional Insureds:</p> <ol style="list-style-type: none"> 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<p>[OTHER] Art. 22.1.8</p> <p><input type="checkbox"/> Railroad Protection Liability Policy</p> <p>(ISO-RIMA or equivalent form) approved by Permitter covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured’s own property and conforming to the following:</p> <ul style="list-style-type: none"> • Policy Endorsement CG 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist. • Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit. • Evidence of Railroad Protective Liability Insurance, must be provided in the form of the <u>Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.</u> 	<p>\$ <u>2,000,000</u> per occurrence \$ <u>6,000,000</u> annual aggregate</p> <p><input type="checkbox"/> Named Insureds:</p> <ol style="list-style-type: none"> 1. New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), the Staten Island Rapid Transit Operation Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner) and all other indemnified parties.

<p>[OTHER] Art. 22.1.8</p> <p>■ Professional Liability</p> <p>A. The Contractor’s Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor’s Professional Engineer or anyone employed by the Contractor’s Professional Engineer.</p> <p>B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor’s Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.</p>	
<p>[OTHER] Art. 22.1.8</p> <p>■ Engineer’s Field Office</p> <p>Section 6.40, Standard Highway Specifications</p>	<p>Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of <u>\$40,000</u></p>
<p>[OTHER] Art. 22.1.8</p> <p><input type="checkbox"/> The Following Additional Insurance Must Be Provided:</p> <p>Umbrella/Excess Liability Insurance - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of \$10,000,000 per Occurrence and \$10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.</p>	

Per **Article 22.2.5 of the Standard Construction Contract**: The Contractor may satisfy its insurance obligations as defined in this Schedule A through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein

SCHEDULE A
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART III. CERTIFICATES OF INSURANCE

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

- (1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

- (2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

CITY OF NEW YORK

CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

[Name of broker or agent (typewritten)]

[Address of broker or agent (typewritten)]

[Email address of broker or agent (typewritten)]

[Phone number/Fax number of broker or agent (typewritten)]

[Signature of authorized official, broker, or agent]

[Name and title of authorized official, broker, or agent (typewritten)]

State of)
) ss.:
County of)

Sworn to before me this _____ day of _____, 20____

NOTARY PUBLIC FOR THE STATE OF _____

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)

PART IV. ADDRESS OF COMMISSIONER

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents must be sent through email to insurance@ddc.nyc.gov. Hard copy documents of the above requirement are no longer required.

(NO FURTHER TEXT ON THIS PAGE)

REVISIONS TO STANDARD SPECIFICATIONS

NOTICE

The Specification Bulletin(s) (“SB(s)”) referenced in this Section (R-Pages) may consist of revisions to the following Standard Specifications:

- New York City Department of Transportation (“NYC DOT”) Standard Highway Specifications, dated 5/16/2022;
- New York City Department of Environmental Protection (“NYC DEP”) Standard Sewer and Water Main Specifications, dated 8/8/2022; and
- NYC DEP Specifications for Trunk Main Work, dated 7/2014.

The SB(s) modify and supersede portions of the applicable Standard Specifications. The provisions contained in this Contract’s I-Pages, S-Pages and SW-Pages may further modify the applicable Standard Specifications.

The following active SB(s) are included as part of this contract:

- *SB 22-006 – INCREMENTAL COST NEAR TRANSIT FACILITIES*

The SB(s) are available online at:

<http://www1.nyc.gov/site/ddc/resources/specification-bulletins.page>

(NO FURTHER TEXT ON THIS PAGE)

I - PAGES

NEW SECTIONS

NOTICE

THE PAGES CONTAINED HEREIN ARE NEW SECTION OF WORK THAT MUST APPLY TO AND BECOME A PART OF THE CONTRACT.

UNLESS OTHERWISE SPECIFIED:

1. ALL SECTIONS WITH THREE DIGITS BEFORE COMA NUMBERS (551.99, 555.80, 559.16 ETC.), SUBSECTIONS, ARTICLES, AND SUBARTICLES AS REFERRED TO HEREIN (I-PAGES) ARE TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S (NYSDOT'S) STANDARD HIGHWAY SPECIFICATIONS, LATEST VERSION OR CURRENT VERSION.
2. ALL REFERENCES HEREIN THE I-PAGES, TO THE "DEPARTMENT", "MATERIALS BUREAU", "REGIONAL ENGINEER", "REGIONAL LANDSCAPE ARCHITECT", "LANDSCAPE ARCHITECT", "DCETS", "DCES", ETC., MUST BE DEEMED TO MEAN THE "ENGINEER" AND/OR HIS/HER DULY AUTHORIZED REPRESENTATIVE. WHERE ANY REFERENCE IS MADE ON THE PLANS OR SPECIFICATIONS TO THE "STATE" OR ANY OF ITS OFFICIALS, THE CONTRACTOR MUST SUBSTITUTE THE CITY OF NEW YORK, DEPARTMENT OF DESIGN AND CONSTRUCTION, AND ITS OFFICIALS AND EMPLOYEES. THE NYSDOT SPECIFICATIONS DESCRIBED ABOVE NEITHER IMPLY THE STATE'S INVOLVEMENT IN ANY TESTING AND APPROVAL OF MATERIALS, NOR IN THE SUPERVISION OF CONSTRUCTION.
3. ALL SECTIONS WITH ONE DIGIT BEFORE PERIOD (5.37, 6.34ADT OR HW-908 ETC.), SUBSECTIONS, ARTICLES, OR SUBARTICLES AS REFERRED TO HEREIN WITHIN THESE NEW SECTION SPECIFICATIONS SHALL BE THOSE OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S (NYCDOT'S) CURRENT STANDARD HIGHWAY SPECIFICATIONS WITH CURRENT ADDITIONS, MODIFICATIONS AND REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS (R-PAGES).

THE STANDARD HIGHWAY SPECIFICATIONS ARE NOT INCLUDED IN THESE I-PAGES. SEE THE NYCDOT STANDARD HIGHWAY SPECIFICATIONS BOOKS FOR STANDARD SPECIFICATIONS TEXTS.

(NO TEXT ON THIS PAGE)

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE NO.
6.19 SBTF	STEEL-BACKED TIMBER GUIDE RAIL WITH STEEL POSTS	I-1
6.34 RXSR	REMOVE, STORE, AND REINSTALL EXPANDED MESH FENCE	I-4
6.40	ENGINEER'S FIELD OFFICE	I-6
6.50 SG	FURNISH AND INSTALL SLUICE GATE	I-14
6.50 TG	FURNISH AND INSTALL TIDE GATE	I-22
6.64 BIN	BRIDGE IDENTIFICATION NUMBER SIGN (WALL MOUNTED)	I-27
6.82 RI	REMOVING, STORING, AND REINSTALLING EXISTING TRAFFIC AND STREET NAME SIGNS	I-29
6.86 PISP	FURNISH AND INSTALL INTERPRETIVE SIGN PANEL (DPR)	I-30
7.13	MAINTENANCE OF SITE	I-33
7.35	PEDESTRIAN CHANNELIZER	I-41
8.53 BFR	BRIDGE FLAG REPAIR	I-43
9.10 TES	TEMPORARY EXCAVATION SUPPORT SYSTEM	I-44
9.23	ASPHALT, FUEL, AND STEEL PRICE ADJUSTMENT ALLOWANCE	I-50
9.71 WBB	VIBRATION MONITORING OF EXISTING STRUCTURES	I-56
555.80020001	CRACK REPAIR BY EPOXY INJECTION (RESTORATION)	I-58
595.98200018	SPRAY-APPLIED, WATERPROOFING MEMBRANE	I-62
607.91300004	WELDED WIRE FABRIC FENCE	I-64
607.93000011	WATERFOWL FENCE	I-69
609.26520011	STEEL FACING FOR CURB ON STRUCTURE (NYC), TYPE D	I-71
634.18370029	INCIDENTAL REPAIRS	I-73
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	I-74
HW-907	ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT	I-75
HW-908	ALLOWANCE FOR EXTRA WORK DUE TO ARCHAEOLOGICAL DISCOVERIES	I-76
PK-643	MAINTENANCE, PROTECTION, AND INSTALLATION OF NYCDPR FACILITIES	I-77

(NO TEXT ON THIS PAGE)

SECTION 6.19 SBTF - Steel-Backed Timber Guide Rail with Steel Posts

6.19 SBTF.1. DESCRIPTION.

Under this item, the Contractor will furnish and install steel-backed timber guide rail and anchorage units in accordance with the contract documents and as directed by the Engineer. The work under this item will include necessary excavation and backfill required to complete this work.

This work will consist of construction of a single steel-backed timber rail element fastened to steel posts and the appropriate treatment at fixed objects, bridge parapets and barriers as shown on the Contract Drawings. It must be erected in the locations sited, and fabricated as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

6.19 SBTF.2. MATERIALS.

1. Steel: All steel posts, backup rails, and splice plates must conform to ASTM A992 steel. The dimensions of each component must conform to the Contract Drawings and ASTM A6. All steel posts must be galvanized below grade and must be non-galvanized above grade after fabrication to meet the requirements of ASTM A123. The galvanized coating must conform to the limits and tolerances shown on the Contract Drawings. Non-galvanized portions of posts must be shop-painted as specified on the Contract Drawing set. A single 3/4 in diameter hole may be drilled 2 in from the top of each post, in the center of the web, to facilitate the galvanizing process. Exposed area of the galvanized steel post must be painted brown (Federal Color Standard 595a 20059) up to 6" below the pavement grade level.

2. Timber: All timber rail and block-out components must conform to the requirements of **Section 2.38** of the NYC DOT Standard Highway Specifications and the following:

- a) Commercial lumber grade No. 1 or better after treatment;
- b) AASHTO M168;
- c) Minimum stress rating of 1350 Psi;
- d) Rough sawn (non-planed) Southern Yellow Pine or Douglas Fir-Larch with nominal dimensions as indicated on the Contract Drawings. Variations in the size of any dimensions must not be more than 1/4 inches +/-;
- e) All timber components must be pressure treated with CCA or ACZA depending on species supplied conforming to AWWA Standard P5 to a minimum net retention of 0.6 lb/Ft³ in the assay zone in accordance with AWWA Standard C14;
- f) All timber components must be free of excess preservative and solvent at the conclusion of the treating process. Post treatment cleaning must be by expansion bath or steaming in accordance with AWWA Standard C2;
- g) Kiln or air dried to a maximum moisture content of 25% after treatment (KDAT-25);
- h) Grade-marked after treatment by an agency certified by the American Lumber Standard Committee (ALSC);
- i) Wood must be free of insect damage and rot, and must be free of large splinters. Wood must be newly prepared, and must not have sat in storage for longer than six months prior to installation. Wood components, which have evidence or insect tunneling, must be rejected and replaced.

3. Fasteners:

- a) Round head bolts must be manufactured in accordance with the sizes designated on the Contract Drawings, the geometric specifications included in ANSI B18.5.1.2.2 and the material specifications for ASTM A307 Grade A. All round head bolts must

be marked with the manufactures symbol and A307. All round head bolts must be hot-dipped galvanized in accordance with ASTM A153 Class C.

- b) Hex Lag Screws must be manufactured in accordance with ASTM A307 Grade A steel. All Hex Lag Screws must be hot-dipped galvanized in accordance with ASTM A153 Class C.
- c) Nuts and Washers must be manufactured in accordance with ASTM A563 and ASTM F844, respectively. All Nuts and Washer must be hot-dipped galvanized in accordance with ASTM A 153 Class C.

4. Guide Rail Hardware: Conform to the AASHTO-AGC-ARTBA a Guide to Standardized Highway Barrier Hardware, 1995 edition. Contractor must provide all required hardware to complete the work. All hardware must be hot dipped galvanized in accordance with A123.

5. Concrete for End Assembly Anchorage Units: Concrete must be Class C25, Type IIA, conforming to the requirements of **Section 3.05** of the NYC DOT Standard Highway Specifications. An approved air-entraining agent must be added at the time that concrete is mixed. Cement must be Type II Portland; sand – Type 1A; coarse aggregate – Type 1, Grade B or Type 2, Size No. 57.

6. Submittals: The Contractor must submit Shop Drawings, product literature and wood samples, for approval, prior to beginning the work and must not begin work until all approvals are granted.

6.19 SBTF.3. CONSTRUCTION DETAILS.

Examine final grades and installation conditions. Locate and install the steel-backed timber guide rail as shown on the Drawings and in accordance with approved Shop Drawings. All posts must be installed parallel and plumb. All rails must be installed parallel and true. The block outs and rail elements must then be erected to produce a smooth continuous rail as shown on the Drawings and approved Shop Drawings.

The steel posts will be driven. The Contractor must use suitable caps and equipment to prevent damage to the posts during driving. Where rock or boulders are encountered in driving the posts, this material must be removed so as to make a hole of sufficient size to permit the setting of the post. The hole must then be backfilled and thoroughly compacted before the driving of the posts.

Before final erection, all galvanized elements, which have been cut or worked so as to destroy the zinc coating and cause the base metal to be exposed must have the exposed base metal thoroughly cleaned and brush coated with zinc rich touch up material.

The concrete anchorage units must be constructed as detailed on the Contract Drawings. The bottom of the anchor must have a full and even bearing on the surface under it. After the concrete anchor is in place, the excavation must be backfilled.

6.19 SBTF.4. MEASUREMENT.

This work will be measured as the number of LINEAR FEET, measured along the axis of the steel-backed timber guide rail and between its extreme outer limits, of steel-backed timber guide rail satisfactorily furnished and installed.

Anchorage units will be measured by the actual number of units installed as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

6.19 SBTF.5. PRICES TO COVER.

The unit price bid must include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work among with all the incidentals.

Payment will be made under:

Item No.	Item	Pay Unit
6.19 SBTF	FURNISHING AND INSTALLING STEEL BACKED TIMBER GUIDE RAIL WITH STEEL POSTS AND TIMBER BLOCK-OUTS	L.F.
6.19 SBTG	FURNISHING AND INSTALLING APPROACH ANCHOR UNITS FOR STEEL BACKED TIMBER GUIDE RAIL WITH STEEL POSTS AND TIMBER BLOCK-OUT	EACH

SECTION 6.34 RXSR - Remove, Store, and Reinstall Expanded Metal Mesh Fence

6.34RXSR.1. DESCRIPTION. Under this section, the Contractor must remove, store, and reinstall existing expanded metal fence in accordance with the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications.

Relocated fence must consist of removing existing fence in its entirety, cleaning posts to the satisfaction of the Engineer, storing fence, and reinstalling fence in the new work where shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications. The furnishing and installing of any posts and miscellaneous hardware, as well as cutting existing panel lengths to fit within the reinstalled location, must be deemed included in the price of this item. Damaged fence will be replaced in kind at no cost to the City. If existing materials are not sufficient for reinstallation, the Contractor must add additional parts as needed to match existing fence at no additional cost to the City.

6.34RXSR.2. MATERIALS. Damaged fence or additional parts needed for reinstallation must match the existing fence.

6.34RXSR.3. METHOD. The locations and limits of the existing fencing to be removed and reinstalled in their original locations as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications. The Contractor must carefully dismantle and remove the existing fencing and provide safe storage of the salvaged materials until reuse. The salvaged fencing and related components must be erected as shown on the Contract Drawings with all posts set plumb and fence panels installed to true line and grade and properly tensioned.

Cut existing panel length to fit within the reinstalled location as approved or directed by the Engineer. Existing fence posts must be cut flush at the sidewalk level and the post must be carefully removed so as not to preclude their reuse. A new base plate must be welded to the existing post or an extension post sleeve must be used to reinstall post and fence at the location shown on the Contract Drawings. All extension posts must be fabricated in strict accordance with the approved Shop Drawings. Posts must be in the sizes and curvatures noted on the Shop Drawings and joints completely welded with welds of proper size and shape; all welds ground smooth to a neat finish. Connection to the adjacent pilaster must be provided as indicated on the contract documents.

Any fences and posts or panels not set plumb and true to line and grade during reinstallation must be removed and replaced at the Contractor's expense. The Contractor must maintain the fences, posts and panels during the life of the contract and must repair and replace all members that are disturbed, damaged or destroyed.

6.34RXSR.4. SUBMITTALS. Shop Drawings: Must be submitted in accordance with each section outlined herein. This must include layout of fencing with dimensions, details and finishes of component accessories post sleeve attachments, and post foundations.

6.34RXSR.5. MEASUREMENT. The quantity of Expanded Metal Mesh Fence to be measured for payment under this Item will be the number of LINEAR FEET of fence of any height satisfactorily reinstalled in accordance with the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications, and measured from center to center of end posts. The total length of fence removed and stored must not be measured for payment but is included in the price bid for this item. Excess of fence after reinstallation will be the property of the Contractor.

6.34RXSR.6. PRICE TO COVER. The contract price bid must be a unit price per LINEAR FOOT of existing Expanded Metal Mesh Fence removed, stored, and reinstalled and must include the cost of all labor, material, equipment, insurance, and incidentals required to complete the work including, but not limited to, the cost of furnishing and installing miscellaneous hardware, as may be required, all as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications. Damaged fence will be replaced in kind at no cost to the City. If existing materials are not sufficient for reinstallation, the Contactor must add additional parts as needed to match existing fence at no additional cost to the City.

Payment will be made under:

Item No.	Item	Pay Unit
6.34 RXSR	REMOVE, STORE, AND REINSTALL EXISTING EXPANDED METAL FENCE	L.F.

The Section below supersedes and replaces Section 6.40 of NYC DOT

Standard Specifications dated May 16, 2022

SECTION 6.40 – Engineer’s Field Office

6.40.1. DESCRIPTION. The Contractor shall provide, furnish, and maintain a fully equipped field office (Type A, B, C, CU, D, DC, or DU, as specified) for the exclusive use of and occupancy by the Department’s engineering personnel and/or Supervising Consultant (herein after called “City personnel”), and by the engineering personnel of private utilities when specified. The field office shall be at a location approved by the Engineer and shall be a commercial building, store front, or with the approval of both Office of Construction Mitigation and Coordination (OCMC) and the Community Board it may be a mobile trailer(s). If a trailer is used it shall be subject to approval by the Engineer, and all necessary permits shall be obtained by the Contractor. The Contractor may have facilities in an adjoining area separated by a lockable door, provided such facilities are in a location approved by the Engineer. The field office must be within ½ mile of the job site. Field offices located further than ½ mile from the job site will require approval by the Director or Assistant Commissioner for Construction.

The field office structure and occupancy thereof shall conform to the requirements of all laws, rules, regulations, and orders applicable to it.

The field office and all equipment, except as otherwise specified, may be new materials or may be used materials in good condition and satisfactory to the Engineer.

6.40.2. MATERIALS.

(A) **GENERAL CONSTRUCTION.** The Engineer’s Field Office shall be in an approved and weatherproof building. It shall have a minimum ceiling height of seven (7’) feet and be partitioned to provide the number of rooms required for the type of office specified. Floor space for Field Office Types C, CU, D, and DU shall be subdivided into work areas based on a floor plan provided by the City to the Contractor upon notification of space availability.

(B) **GENERAL FACILITIES.** The field office shall contain or have the following facilities incorporated:

- (a) Lighting - Electric light, non-glare type luminaries to provide a minimum illumination level of 100 ft.- candles at desk height level.
- (b) Heating and Cooling - Adequate equipment to maintain an ambient air temperature of 70° F. ±5°.
- (c) Electrical Energy Outlets
- (d) Toilet - A separate enclosed room, properly ventilated per code and complying with applicable sanitary codes shall contain a lavatory with a sink that provides running hot and cold water, flush-type toilet, mirror, electric hand dryer, and paper towel dispenser.
- (e) Potable Water - Potable water supplied from an existing system or five (5) gallon capacity water cooler of a type to be approved by the Engineer shall be provided for use by City personnel. Replacement bottles of water shall be provided by the Contractor, when required.
- (f) Signs - Store front locations shall have a window graphic sign in black and white lettering with the following inscription. Other locations shall have a wood or metal sign affixed on the outside wall of the building with the following inscription painted in black block lettering on a white background. Paints shall be approved exterior enamels.

CITY OF NEW YORK	2-1/2”
DEPARTMENT OF DESIGN AND CONSTRUCTION	3-1/2”
INFRASTRUCTURE	2-1/2”
RESIDENT ENGINEER’S FIELD OFFICE	2-1/2”

- (g) Electric Refrigerator - Five (5) cubic feet minimum capacity for use by City personnel.
- (h) Microwave, Toaster Oven, and Coffee Maker - Basic reheating equipment or approved appliances for use by City personnel.
- (i) Windows and Doors - All windows and doors shall be weatherproof, and each equipped with adequate locking devices. Each window shall be equipped with vertical blinds. Exterior doors shall be provided with two (2) separate "high security" dead bolt type cylinder locks, keyed alike, and three (3) keys shall be furnished for each lock.
- (j) Partitions - Partitions for workspace enclosures shall be either permanent walls or of the modular type similar to Herman Miller's standard fabric covered line.
- (k) Kitchen Sink – Mechanism to provide non-drinking, hot and cold, running water.
- (l) Security Cameras – Wi-Fi enabled security cameras must be provided at all entrances and exits, except that fire escapes / emergency stairwells do not require cameras. One security camera must be provided for the interior of the field office, with the location to be determined by the Engineer. Cameras must be minimum 1080p video resolution. Cameras must have internet cloud storage, with all videos stored for a minimum of two weeks. The cloud storage must be accessible via desktop or mobile. Cameras may be hardwired for power or battery powered; battery powered cameras must have the batteries changed by the Contractor as required to ensure no lapses of service. Signs must be posted indicating that the area is under video surveillance.

(C) OFFICE EQUIPMENT.

- (a) Pencil Sharpener - One standard pencil sharpener for use by City personnel.
- (b) Telephone Answering Machine - The telephone answering machine to be provided shall be an electronic digital voice machine with emergency call forwarding capability. It shall be operable twenty-four (24) hours per day and, when unattended, shall transmit to the caller the following message:

"You have reached the Field Office of the New York City Dept. of Design and Construction. No one is here now. We check our incoming messages frequently. We will get back to you as soon as possible. Please leave your name, message, and phone number where you may be reached. In case of emergency, call the New York City Hotline at 311. Again, the emergency number is 311."

All electronic voicemail messages shall be automatically forwarded as email attachments, to allow for the voicemails to be played remotely.

- (c) Computer Equipment - Computers shall be provided for all contracts regardless of construction duration.

Computers furnished by the Contractor for use by City Personnel, for the duration of the contract, shall be in accordance with Table I - ADDITIONAL SPECIFIC REQUIREMENTS, contained herein, and shall meet the following minimum requirements:

- (1) Personal Computers – Personal Computers must meet the requirements of the US General Services Administration (GSA) Government-Wide Strategic Solutions (GSS) Standard Laptop, Desktop, and Tablet Specifications, V7. (Available online at <https://hallways.cap.gsa.gov/>)
 - (a) Computer type for Personal Computers to be "Desktop Small Form Factor." Computer type for projector laptop to be "Lightweight Notebook" or "Notebook"
 - (b) The following components listed as optional in the GSA specification must be provided with each personal computer: monitor, speakers, optical drive, smart card reader, webcam, and headset.

(c) The following additional software must be provided with licenses for each computer:

1. Adobe Acrobat Pro DC or Bluebeam Revu
2. Microsoft Office Professional
3. Autodesk AutoCAD LT
4. Anti-virus software
5. Microsoft Visio (only one license required per field office)

(2) All field offices requiring computers shall be provided with the following:

(a) One (1) broad-band internet service account. See table below for minimum required upload and download speeds. Telephone service should be bundled together with Internet connectivity. Because of throughput requirements Verizon FIOS is the preferred connectivity provider where available.

Office Personnel #	Download Speeds (Minimum)	Upload Speeds (Minimum)
1 – 5	10 Mbps	15 Mbps
6 – 10	20 Mbps	15 Mbps
11 – 15	25 Mbps	15 Mbps
16 – 20	50 Mbps	15 Mbps

This account will be active for the life of the project. The e-mail name for the account shall be the NYCDDC Field Office/project Id (preferably Gmail or Outlook – e.g. HBPED800Q@gmail.com).

- (b) All necessary Cabling.
- (c) Storage Boxes for and Blank CDs/DVDs.
- (d) UPS/Surge Suppressor combo.
- (e) 10 USB Thumb (or Flash) Drive – 16 GB each

(3) All computers required for use in the Engineer’s Field Office shall be delivered, installed, and setup in the Field Office by the Contractor.

(4) All Computer Hardware shall come with a three (3) year warranty for on-site repair or replacement. Additionally, and notwithstanding any terms of the warranty to the contrary, the Contractor is responsible for rectifying all computer problems or equipment failures within one (1) business day.

(5) An adequate supply of blank CDs/DVDs, and paper and toner cartridges for the printer shall be provided by the Contractor and shall be replenished by the Contractor as required by the Engineer.

(6) It is the Contractor’s responsibility to ensure that electrical service and phone connections are also available at all times; that is, the Field Office Computer(s) is to be powered and turned on twenty-four (24) hours each day.

Broadband connectivity is preferred at each field office location. Please take into consideration that an extra phone line dedicated to the modem must be ordered as part of the contract unless Internet broadband connectivity, via Cable or FiOS, is available at the planned field office location. Any questions regarding this policy should be directed to the Director of Information Technology Services at 718-391-1761.

- (d) Data Access - Electronic access to the Equipment Watch Retail Rental Rates database (formerly known as The AED Green Book, published by Equipment Watch), shall be provided for all contracts that have a total Consecutive Calendar Days for General Construction duration as set forth in Schedule A of greater than 545 CCD's. Contracts of lesser duration shall not require any data access.
- (D) Field Testing Equipment.
 - (a) Air Entrainment Meters - Pressure Type, with carrying case for use by City personnel. Each meter shall be capable of producing an accurate test result in approximately five (5) minutes and shall comply with ASTM Designation C231.
 - (b) Slump Test Sets - Slump cone and test sets conforming to the requirements of ASTM Designation C143, complete with rod and scoop for use by City personnel.
 - (c) Thermometers: For use by City personnel.
 - (1) 1 Minimum-maximum thermometer.
 - (2) 3 Asphalt thermometers of stainless-steel construction with an accuracy of 0.5% of the full scale, able to measure temperatures from 50 to 500 degrees F. in 5-degree increments.
 - (3) 3 Surface Thermometers able to measure temperatures of flat surfaces similar to Sargent-Welsh Model S81441-D, or an approved equivalent.
 - (d) Non sparking Pinch Bar - For use in opening manholes.
 - (e) Gas Meters - For use in detecting the presence of explosive gases and vapors for use by City personnel.
 - (f) Straight Edge - One 10-foot-long straight edge for use by City personnel in detecting pavement surface tolerance.
 - (g) 48" Smart Level - For use in determining pedestrian ramp and sidewalk slopes.
 - (h) Chlorine Test Kits – For testing residual chlorine levels following water main flushing.
 - (i) Green Florescent Power Trace-Dye – For testing sewer connections.
 - (j) One Million Candlepower Rechargeable Flashlight.
 - (k) Distance Measuring Wheel – For measuring long distances.
- (E) Additional Office Electronics –
 - (a) Photocopying machine must be a stand-alone, heavy duty, electric, dry-process color photocopying type with color scan and send capability via e-mail, a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers for printing capability.
 - (b) Fax machine must be provided with an adequate supply of copy paper, toner, etc. The supply of copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer.
 - (c) Paper shredder must be a heavy-duty commercial grade diamond cut shredder with automatic start. The shredder shall be able to receive 8-1/2 inch wide paper and shred a minimum of 15 sheets simultaneously along with CDs and staples.

- (d) Projector must be 1080p LCD with a min. of 2200 ANSI Lumens, 1920 x 1080, 16:9, 40,000:1 contrast ratio, HDMI, VGA, USB, and a 10' diagonal, 16:9 Projection Screen. A screen must be provided if directed by the Engineer. A laptop must be provided for use with the projector, and all required cables for connecting the laptop to the projector.

6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEER'S FIELD OFFICE.

In addition to the general requirements, each type of Field Office shall have the minimum floor area indicated in Table 6.40-I calculated based on usable area only, excluding any loss factors. Loss factors are defined as those areas such as lobby, sidewalk window ledge, elevator shafts and stairways. The Contractor shall provide and maintain furnishings for each type of Field Office in the quantity specified in Table 6.40-I. The furnishings shall be new or used equipment satisfactory to the Engineer:

- (a) Each Type shall have a minimum of one outside door and four windows.
- (b) Type C shall be partitioned to provide three (3) rooms.
- (c) Type CU shall be partitioned to provide four (4) rooms, one of which shall be at least 150 s.f. in area (for use by private utilities).
- (d) Type D and DC shall be partitioned to provide four (4) rooms.
- (e) Type DU shall be partitioned to provide five (5) rooms, one of which shall be at least 150 s.f. in area (for use by private utilities).

TABLE 6.40-I – ADDITIONAL SPECIFIC REQUIREMENTS

SPECIFIC REQUIREMENTS	FIELD OFFICE TYPE						
	A	B	C	CU	D	DC	DU
Minimum useable floor space (Square Feet)	400	800	1,200	1,200	1,800	2,320	1,800
Office desks, at least 4'-8" x 2'-8", with drawers, locks, and keys.	2	2	4	8 ^a	8	8	12 ^a
Swivel chairs, with arms, for the above.	2	2	4	8 ^a	8	8	12 ^a
Office folding chairs, metal, with padded seats and backs.	2	3	6	14 ^b	8	8	16 ^b
Steel supply cabinets (approximate size 72" high by 36" wide by 18" deep), with four adjustable shelves, tumbler lock and 3 keys.	1	1	1	1	1	1	1
Fire resistant cabinet, 4-drawer, legal size with lock and three (3) keys, meeting the requirements for "Filing devices, Insulated (36 E 9)" Class D Label, of the Underwriters' Laboratories, Inc. Specifications.	1	1	1	3 ^c	4	4	6 ^c
Individual lockers (17" wide x 18" deep x 72" high) with flat key locks and two (2) keys each.	1	1	4	4	4	4	4
Calculating machines, tape type with digital display registering at least ten (10) digits.	1	1	2	2	3	3	3
Wastepaper baskets (metal, approximately 12" square by 16" high).	1	2	2	6 ^a	4	4	8 ^a
Fire extinguishers, non-toxic, dry chemical type meeting Underwriters Laboratories, Inc., approval for Class A, Class B and Class C fires with a minimum rating of 2A: IOB:10C.	1	1	2	3 ^d	4	8	5 ^d
First Aid Kit kept properly stocked with appropriate first aid supplies at all times.	1	1	1	1	2	2	2
Drafting tables (3'-0" x 5'-0") with storage drawers and stool.	1	2	2	3 ^d	4	4	5 ^d

SPECIFIC REQUIREMENTS	FIELD OFFICE TYPE						
	A	B	C	CU	D	DC	DU
Photocopying Machine	1	1	1	1	1	1	1
Standalone networked color laser printer. (Not required if photocopying machine prints in color)	1	1	1	1	1	1	1
Vertical filing plan racks for six sets of 22"x36" plans each rack.	1	1	2	3 ^d	4	4	5 ^d
Telephone lines for calls, where one shall be dedicated for the Fax Machine, one for each computer fax/modem and the others for telephone instruments.	4	6	6	7 ^e	8	8	9 ^e
Telephone instruments.	2	2	3	5 ^e	4	4	6 ^e
Telephone answering machine.	1	1	1	1	1	1	1
Fax Machine	1	1	1	1	1	1	1
Personal Computer	1	3	3	3	4	4	4
Bottled water with refrigerator unit-hot/cold water. (For private utilities room.)	0	0	0	1	0	0	1
Paper Shredder	1	1	1	1	1	1	1
Projector	0	0	1	1	1	1	1
Conference Room, 320 square feet (20'x16' minimum, equipped with (2) 3'x6.5' tables and (30) chairs.	0	0	0	0	0	1	0

^a Provide four (4) each of Office Desks, Swivel Chairs and Wastepaper Baskets in private utilities room.

^b Provide eight (8) Folding Chairs in private utilities room.

^c Provide two (2) Fire Resistant 4- Drawer Legal Size Cabinets in private utilities room.

^d Provide one (1) each of Fire Extinguisher, Drafting Table and Vertical File Rack in private utilities room.

^e Provide one (1) telephone line and two (2) telephone instruments for the exclusive use by private utilities personnel. The line shall interconnect the two telephone instruments by push button control.

6.40.4. CONSTRUCTION METHODS. The building shall be fully equipped and made available for use and occupancy by the Department's personnel and/or Supervision Consultant not less than thirty (30) days prior to the start of any contract work.

The building interior (including access foyers, stairwells, etc.) shall be maintained in good, clean, and sanitary working condition by the Contractor for the duration of the contract. The Contractor shall provide and pay all costs for electrical service, telephone service for calls within New York City limits, hot and cold water, heat and fuel, and daily janitor service. Staples, such as paper towels, hand soap, toilet paper, and similar supplies, shall always be available.

Where necessary, the site for a mobile trailer(s) shall be graded and shoulder stone placed and maintained as directed by the Engineer to provide a parking area for City personnel and, if necessary, an approach road shall be provided. Plumbing work shall include all water supply, drainage and piping required for the operation of a complete installation. Temporary water service shall be provided from an existing main and extended into the trailer and all fixtures requiring water supply shall be properly connected up. All necessary soil, waste, vent and drainage piping shall be provided and connected to the existing sewer or as otherwise directed.

The office, incorporated facilities, equipment, and personal property of the Department's employees shall be protected by the Contractor against loss or damage from fire, theft, or other causes, at all hours of the day and night. The Contractor shall provide fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of forty thousand dollars (\$40,000.00) for office equipment of the City of New York in the Engineer's field office and for property of City personnel that is used in the contract work and stored in the office. All insurance coverage shall be written by a company approved by the Commissioner and payable in case of loss to the City of New York. The office shall be maintained by the Contractor in first class condition until final acceptance of the work.

At the direction of the Engineer, any equipment on the above lists may be deleted. The Engineer may

direct that other equipment of equivalent value be supplied by the Contractor or an appropriate credit be taken for the value of equipment not provided.

When directed by the Engineer, the Contractor shall disconnect all services and remove and dispose of all temporary installations from the site, including fencing, surfacing and utilities, the area shall then be cleaned, loamed, and seeded if required and left in a neat and acceptable condition. On and after the date of the Engineer's Final Acceptance, the temporary structure and all installed equipment shall become the property of the Contractor, and shall be disposed of, by him, away from the site of the work. Engineer's Final Acceptance shall be when the Contractor has completed all punch list work and Official Completion Date has been set.

6.40.5. NONCONFORMANCE. No payment will be made under Engineer's Field Office for each calendar day during which there are deficiencies in compliance with the requirements of any subsection of this specification. The first calendar day shall commence twenty-four (24) hours after notice to the Contractor of such a deficiency. This non-payment shall be deducted from the Contractor's next estimate as a charge to the Contractor on the item. The amount of such calendar day non-payment will be determined by dividing the unit price bid per month by 30.

In addition, the Contractor may be subject to liquidated damages in accordance with Schedule A.

6.40.6. MEASUREMENT. The quantity to be measured for payment under this item shall be the number of months that the Field Office is available for occupancy by the Field Engineers during the period of the contract. Payment will begin the first month that the office is fully equipped, serviced as specified, and made available for occupancy. The Field Office is to be continuously made available and monthly payments will continue for the duration of the contract through a period not to exceed 6 months past the Substantial Completion date. When directed in writing by the Commissioner, the Field Office will be provided and paid for a period of time beyond 6 months past the Substantial Completion date. Payment for each month's occupancy after the date of Substantial Completion acceptance will be made as part of the final estimate. Monthly payments may be terminated on a specified date prior to acceptance of the contract by written notification by the Engineer that such office will no longer be required on the contract.

In order to incentivize early Substantial Completion of the Project, the City agrees to share the savings resulting from the reduction of the quantity measured for payment under this item.

If the determination of Substantial Completion is reached at least two (2) months earlier than the Substantial Completion date set forth in the Notice to Proceed letter, plus any approved time extensions, the Contractor and the City will evenly split the saved amount. This payment will be in addition to any payments of incentive for early completion if one is specified for the Project.

For example, using a contract with a 30-month duration for achievement of substantial completion, with the Engineer's Field Office directed by the Commissioner to remain open six (6) months after the substantial completion date per Subsection 6.40.6 above, the following would apply under these two scenarios:

1. Project substantial completion is achieved in 28.5 months: Because the contract was completed within two (2) months of the scheduled substantial completion date, the contractor is entitled to be paid for the 28.5 month project duration plus the six (6) months after Substantial Completion, amounting to 34.5 months to be paid to the Contractor for the Engineer's Field Office, with no additional amounts due to the contractor from any savings.
2. Project substantial completion is achieved in 26 months: Because the contract was substantially completed more than two (2) months early, the contractor is entitled to be paid for the 26 month project duration plus six (6) months after substantial completion plus half of the four months saved, amounting to 34 months to be paid to the contractor for the Engineer's Field Office.

6.40.7. PRICE TO COVER. The unit price bid per month for the item Engineer's Field Office shall include the cost of furnishing all labor, materials, equipment, ground rental, fire and theft insurance, and utility charges necessary to complete the work of providing or constructing the field office; making all necessary electrical, water, sewer, and other connections required to make the above facilities operative; payment of all rental costs; furnishing and paying for heating fuel, as required; all electrical energy; private telephone services; staples, as specified; and all necessary incidentals to complete the work - all in accordance with the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
6.40 A	ENGINEER'S FIELD OFFICE (Type A)	MONTH
6.40 B	ENGINEER'S FIELD OFFICE (Type B)	MONTH
6.40 C	ENGINEER'S FIELD OFFICE (Type C)	MONTH
6.40 CU	ENGINEER'S FIELD OFFICE (Joint Use) (Type CU)	MONTH
6.40 D	ENGINEER'S FIELD OFFICE (Type D)	MONTH
6.40 DC	ENGINEER'S FIELD OFFICE WITH CONFERENCE ROOM	MONTH
6.40 DU	ENGINEER'S FIELD OFFICE (Joint Use) (Type DU)	MONTH

SECTION 6.50 SG - Furnish and Install Sluice Gate

6.50SG.1. DESCRIPTION. Under this item, the Contractor must furnish and install the sluice gates and associated motorized actuators at the locations shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

6.50SG.2. MATERIALS.

(A) GENERAL

All materials and equipment must be the latest standard product of a manufacturer regularly engaged in the design and the manufacturer must, within the last seven consecutive years, have successfully completed in a timely fashion at least one (1) sluice gate installation similar in scope and type to the required work. Gates must be furnished with all necessary accessories for a complete installation, including control systems. All gates for this Section 6.50 SG and Section 6.50, TG Furnish and Install Tide Gate, described herein, must be provided by one manufacturer.

Anchor bolts for gates must not conflict with the concrete reinforcing bars. Contractor will not be allowed to drill through the reinforcing steel. The gate manufacturer must modify the gate frame as required to prevent a conflict with the bolts and reinforcing steel. All gates are rising stem unless noted otherwise. Finish will be mill finish on stainless steel. Welds must be sandblasted to remove weld burn and scale.

Materials must meet the following requirements:

American Society for Testing and Materials (ASTM)

ASTM A240/A240M-22a. Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Application,

ASTM A276/A276M-17. Standard Specification for Stainless Steel Bars and Shapes,

ASTM B584-22. Standard Specification for Copper Alloy Sand Castings for General Applications,

ASTM D4020-18. Standard Specification for Ultra-High-Molecular-Weight Polyethylene Molding and Extrusion Materials,

ASTM F593-17. Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs,

ASTM F594-09(2020). Standard Specification for Stainless Steel Nuts.

(B) SLUICE GATES: Gates must be fabricated from Type 316L stainless steel. The slide and reinforcing stiffeners must have a minimum thickness of 1/4", per AWWA C561 and must have adequate strength to prevent distortion during normal handling, during installation, and while in service. Gates must meet leakage requirements of AWWA C561A latest edition.

- a. Slide: Deflection under design seating and unseating head must be no more than 1/720 of span or 1/16 inch, whichever is smaller, under the maximum design head.

- b. Reinforcing stiffeners: Must be welded to the slide and mounted horizontally. Vertical stiffeners must be welded on the outside of the horizontal stiffeners for additional reinforcement. When required to maintain proper plate stress and deflection intermediate vertical gussets must be provided. Appropriate safety factors must be applied to the ultimate tensile and yield strength of the material.
 - c. The stem connector must be constructed of two angles or plates. The stem connector must be welded to the slide. A minimum of two bolts must connect the stem to the stem connector.
1. Furnish and install sluice gate with all necessary or appurtenant items associated with sluice gates. See Contract Drawings for:
 - a. Number of Gates
 - b. Configuration
 - c. Size
 - d. Type of Closure
 - e. Operating System Configuration
 - f. Seating and Unseating Heads
 - g. Wall Thimbles
 - h. Face-Mounted Frame
 2. Manufacturer will be from list below or approved equal.
 - a. Whipps, Inc. Series 924
Address: 370 South Athol Road. Athol, MA 01331. USA.
Phone: +1 (978) 249-7924
Fax: +1 (978) 249-3072 Website: <https://whipps.com/>
 - b. Rodney Hunt Company
Address: 46 Mill Street. Orange, MA 01364. USA.
Phone: +1 (281)-962-6369
Email: sales@rodneyhunt.com
Website: <https://rodneyhunt.com/>
 - c. Waterman USA
Address: 25500 Road 204. Exeter, CA 93221. USA.
Phone: (559)-562-4000
Fax: (559)-562-2277
Email: ContractSales@WatermanUSA.com
Website: <https://watermanusa.com/>

(C) FRAMES

1. Frame must be made of Type 316L Stainless Steel. All structural components of the frame must have a minimum thickness of 1/4" per AWWA C561.
2. Capable of providing true dimensions within tolerances and preventing binding and excessive wear of sliding parts. The frame must extend to accommodate the entire height of the slide when the slide is in the fully opened position on upward opening gates or downward opening weir gates.

3. Mounting: Frame design must allow for mounting directly to a wall with stainless steel anchor bolts and grout or mounting to a wall thimble with stainless steel mounting studs and a mastic gasket material. Mounting style must be as shown on the Contract Drawings.
4. All wall mounted or wall thimble mounted gates must have a flange frame. Flat frame gates are not acceptable.
5. The structural portion of the frame that incorporates the seat/seals must be formed into a one-piece shape for rigidity. Guide members that consist of two or more bolted structural members are not acceptable. Guide member designs where water loads are transferred through the assembly bolts are specifically not acceptable.
6. Gussets must be provided as necessary to support the guide members in an unseating head condition. The gussets must extend to support the outer portion of the guide assembly and must be positioned to ensure that the load is transferred to the anchor bolts or the wall thimble studs.
7. A rigid stainless steel invert member must be provided across the bottom of the opening. The invert member must be of the flushbottom type on upward opening gates.
8. A rigid stainless steel top seal member must be provided across the top of the opening on gates designed to cover submerged openings.

(D) STEM

1. Material: The stem must be constructed of solid Type 316 stainless steel bar for the entire length, the metal having a tensile strength of not less than 75,000 psi.
2. Diameter: Capable of withstanding anticipated opening and closing thrusts under head and 1-1/2 inches minimum outside diameter for the threaded portion.
3. Length: Capable of permitting easy installation and removal. Maximum L/R ratio for the unsupported part of the stem must not exceed 200.
4. On manually operated gates, stems must be provided with adjustable stop collars to prevent over closing of the slide.
5. The stem must be threaded to allow full travel of the slide unless the travel distance is otherwise shown on the Contract Drawings.
6. The operating stem must be designed to transmit in compression at least 2 times the rated hoist output with an effort of 40 lb on the crank or handwheel. The Euler column formula must be utilized. Where an electric actuator is used the stem design load must not be less than 1.25 times the output thrust of the hydraulic cylinder with a pressure equal to the maximum working pressure of the fluid supply or 1.25 times the output thrust of the electric actuator at the stalled condition.
7. The stem must be designed to withstand the tension load caused by the application of a 40 lb effort on the crank or handwheel without exceeding 1/5 of the ultimate tensile strength of the stem material.

(E) STEM GUIDE: Stem Guide: Stem guide must be provided when necessary to ensure that the maximum L/R ratio for the unsupported part of the stem is 200 or less. Length must be sufficient to retain at least 2/3 of gate slide when gate is in the fully open position

(F) SEALS

1. All gates must be equipped with self-adjusting ultra-high molecular weight (UHMW) polyethylene seat/seals to restrict leakage and to prevent metal to metal contact between the frame and slide. Seat contact pressure must not exceed 600 psi at the design head.

Gates that utilize rubber “J” seals or “P” seals are not acceptable. Reclaimed rubber must not be used.

2. The seat/seals must extend to accommodate the 1-1/2 x the height of the slide when the slide is in the fully closed or fully opened position.
3. All upward opening gates must be provided with a resilient seal to seal the bottom portion of the gate. The seal must be attached to the invert member or the bottom of the slide and it must be held in place with stainless steel attachment hardware.
4. The seal system must be durable and must have been factory tested to confirm negligible wear (less than 0.01”) and proper sealing. The factory testing must consist of an accelerated wear test comprised of a minimum of 25,000 open-close cycles using a well-agitated sand/water mixture to simulate fluidized grit. Hold seals in place by Type 316L Stainless Steel bar and fasteners fastened to the frame or slide. Arrangements with seals that are force fit or held in place by adhesives are unacceptable.
5. Seals must be mounted so as not to obstruct the water way opening.
6. Seals must be fully field adjustable and replaceable.
7. Provide top seal for all standard upward opening gates.

(G) FASTENERS: Type 316 Stainless Steel.

(H) ANCHOR BOLTS: Will be provided by the gate manufacturer for mounting the gates and appurtenances. Quantity and location must be determined by the gate manufacturer. If epoxy type anchor bolts are provided, the gate manufacturer must provide the studs and nuts. Anchor bolts must have a minimum diameter of 1/2-inch.

(I) WALL THIMBLES: Must be provided when shown on the Contract Drawings.

1. Wall thimbles shall be fabricated stainless steel construction of adequate section to withstand all operational and reasonable installation stresses.
2. Wall thimbles shall be constructed of ¼-inch minimum thickness stainless steel and the front face must have a minimum thickness of ¼-inch.
3. The fabrication process must ensure that the wall thimble is square and plumb and the front face is sufficiently flat to provide a proper mounting surface for the gate frame.
4. A water stop shall be welded around the periphery of the thimble. Wall thimbles shall be designed to allow thorough and uniform concrete placement during installation.
5. Studs and nuts must be stainless steel. Water stop may be stitch welded.
6. A suitable gasket or mastic must be provided to seal between the gate frame and the wall thimble.

(J) MANUAL OPERATORS: Unless otherwise shown on the Contract Drawings or directed by the Engineer, the gates will be operated by a manual handwheel or a manual crank-operated gearbox. Mechanical seals must be provided on the operating nut and pinion shaft to exclude moisture and dirt and prevent leakage of lubricant out of the hoist.

1. For manual operators, the gate manufacturer must select the proper gear ratio to ensure that the gate can be operated with no more than 40 pounds on handwheels and 25 pounds on cranks when the gate is in the closed position and experiencing maximum operating head. Contractor must provide detailed calculations (utilizing seating and unseating heads scheduled) for sizing steam diameter and operator. Breakaway force must be a minimum 1.5 times the lifting force.
2. The Manual Operator must operate in the clockwise direction to close the gate or valve.

3. The Manual Operator must have an arrow and the word "Open" indicating the required rotation direction.
4. The handwheel or crank must be removable.

(K) ELECTRIC OPERATORS

1. General

The electric motor must include, but not be limited to, the motor, gearing, solid-state non-contacting position encoder, solid-state direct acting torque/thrust sensor, de-clutch lever, and hand-wheel as a self-contained unit. Power to the actuator must be 460V, 3-Phase power, unless otherwise indicated in the Contract Drawings.

2. Motor

Electric motors must be specifically design for gate actuator service, and must be totally enclosed, non-ventilated with high starting torque. As a minimum, the electric motor enclosure must meet NEMA 6P/IP68 construction. Motors must be capable of operating through one complete cycle, open-close-open or close-open-close, under the maximum specified operating conditions when voltage to the motor is plus or minus 10 percent of the specified voltage. Motors must have Class F insulation with Class B temperature rise. Overload protection must be by means of inherent motor thermal sensors embedded in the windings. The motor must be rated 460Vac.

3. Power Gearing

The actuator must use single reduction gearing as required for the applications. The primary gear must be a self-locking worm. All gearing must be hardened alloy steel except for the worm wheel, which must be bronze. All gear shafts must be mounted in ball or roller bearings.

4. Lubrication

Lubrication of all gearing and bearings must be oil. Lubricating grease is not acceptable. Seals must be provided at all exit points of the gear case to prevent leakage of lubricant. Critical areas subject to high wear must be double sealed. Gear case must have provisions for inspection and re-lubrication without disassembly. Lubricants must be suitable for year-round service for ambient conditions of minus 20 degrees F to 150 degrees F.

5. Stem Nut

The gate or valve actuator must have a stem nut (or drive bushing) of high tensile bronze manganese or other material compatible with the valve stem material.

6. Handwheel

- a. The actuator must be equipped with a handwheel for manual operation, so that operation by motor must not cause the handwheel to rotate, and operation by handwheel must not cause the motor to rotate. The handwheel clutch design must prevent transmission of the motor torque to the handwheel should power be returned to the motor while the handwheel is in use.
- b. Handwheel must not share gears with the motor. Friction-type de-clutch mechanism are not acceptable. See the above paragraphs for Manual Operator requirements.

7. Switches
 - a. Position Sensing:
 - Position sensing must be accomplished via non-contacting solid-state device such as a Hall Effect or Optical Encoder. The encoder must be programmable from outside the actuator enclosure and must incorporate user-programmable switch contacts rated at a minimum of 5 amps inductive at 120Vac. Contacts must be field convertible from Normally Open to Normally Closed or reverse and must permit verification of switch set point and configuration from outside the actuator enclosure. There must be minimum 4 sets of contacts available for customer use.
 - b. Torque Switches:
 - Each actuator must be equipped with a device to constantly monitor the torque output in both directions of travel. The torque sensor must allow programming of independent set points for opening and closing directions of travel. The torque sensor will interrupt the control circuit in the even a set point is exceeded. The sensor must be programmable from outside the actuator and must permit verification of sensor calibration. Actual torque output must be available via the actuator's local control display.
 - c. Electrical Controls Enclosure (Switch Compartment):
 - All controls must be housed in a separately sealed enclosure so that moisture entering the terminal compartment cannot affect the controls. All actuator control inputs must be opto-isolated to allow for a minimum 2.0kV surge protection, and to segregate internal from external power sources.
8. Electrical Controls
 - a. All electrical controls must be supplied integral in the actuator switch compartment and must be pre-mounted and shop-wired to a separately sealed terminal compartment so integral controls are not exposed to the ambient environment at any time, and to facilitate a minimum of field wiring at the time of installation.
9. Operation

Open-Close Service:

 - Operators must operate automatically by remote signal specified and as indicated on the Drawings.
 - Remote Signal must control, with selector switch in REMOTE position, a self-contained electromechanical reversing starter to open and close actuator.
 - In LOCAL position, control actuator with local control station.
 - In OFF position, the actuator does not operate.
10. Manufacturers will be from list below or approved equal.
 - a. Flowserve - Limitorque MX Series

Address: 5215 North O'Connor Boulevard, Suite 700. Irving, TX 75039. USA.
Phone: +1 (972)-443-6500
Website: <https://www.flowserve.com/>
 - b. Emerson - EIM Controls

Address: 8000 West Florissant Avenue. P.O. Box 4100, St. Louis, MO 63136. USA.
Phone: +1 (888)-889-9170
Website: <https://www.emerson.com/>

c. Rotork

Address: 675 Mile Crossing Blvd. Rochester, NY 14624. USA.

Phone: +1 (585)-247-2304

Email: sales@rotork.com

Website: <https://www.rotork.com/>

11. Spare Parts

Supply one lot of recommended spares for each actuator. Minimum spares must include one fuse for each type, one spare stem nut for every gate or valve operator. No separate payment.

6.50SG.3. CONSTRUCTION DETAILS.

(A) INSTALLATION

1. Installation of the gates and appurtenances must be done in a workmanlike manner. It must be the responsibility of the Contractor to handle, store, and install the equipment specified in this Section in strict accordance with the manufacturer's recommendations and as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.
2. The Contractor must review the Installation Shop Drawings and installation instruction prior to installing the gates.
3. Mount thimbles and gates plumb in both vertical planes and level in the horizontal plane.
4. Coat seating surfaces between frame and wall thimble with a waterproof plastic compound prior to tightening of frame studs.
5. The Contractor must fill the void in between the gate frame and the wall with non-shrink grout as shown on the Shop Drawing and in accordance with the manufacturer's recommendations.
6. The Contractor must add a mastic gasket between the gate frame and wall thimble (when applicable) in accordance with the manufacturer's recommendations.
7. Adjust limit switches in electric and hydraulic operators in accordance with manufacturer's instructions.
8. Face Mounted Gates: Where wall thimbles are not provided, mount gate to wall with anchor bolts and 1-inch grout pad in accordance with manufacturer's recommendations.
9. Coordinate the installation of the actuator with the gate or valve supplier. There must be single-source responsibility. The gate or valve suppliers must be responsible for fabrication, coordination, and assembly for a complete operating system.

(B) FIELD QUALITY CONTROL

1. **Testing, Training, and Start-Up.** As specified below.
 - Leakage Tests: Conduct in accordance with AWWA C561 with allowable leakage limits 50% of AWWA allowance. Leakage must not exceed 0.05 gpm/ft of wetted seal perimeter in seating head and unseating head conditions.
 - After the gate installation and checking, run gates through at least 2 full cycles from the closed position to the fully open position and back to the closed position and confirmed that they operate without binding, scraping or distorting. Also operate gates with intermediate stops.
 - Verify functionality of all controls and limit switches. The effort to open and close manual operators must be measured, and must not exceed the maximum operating effort specified within this Section. Electric motor actuators must function smoothly and without interruption.

- Provide certificate of proper installation.
 - The Contractor must arrange a final sluice gate performance test in the presence of the Engineer and NYC DPR to ensure all items of equipment are in full compliance with this Section.
2. **Manufacturer’s Field Services.**
- a. Coordinate field service work with the manufacturer’s representative, NYC DPR, and Engineer prior to initiating such work.
 - b. Each gate will be considered as a separate installation. Manufacturer’s representative must perform the following services in three separate trips (minimum) as described below:
 - Installation assistance and inspection: One Man-Day.
 1. Advise/observe the Contractor on the installation of the gates.
 2. Check and verify the installation of the gates in accordance with the Drawings and manufacturer’s installation instructions.
 - Certification of installation, field testing, and start-up assistance: One Man-Day.
 - Each Man-Day consists of 8 working hours.
 - The specified durations are the minimum required time on the job site and do not include travel time.
 - c. Owner Operator Training: Must be performed when all three sluice gates on the Contract Drawings are installed and operable. One Man-Day.
3. **Warranty.**

The Contractor must purchase an extended warranty from the manufacturer on the sluice gates, sluice gate controls, and appertaining equipment of a length of 10 years from date of Substantial Completion. The Contractor will transfer ownership of warranty to NYC Department of Parks and Recreation following completion of construction.

6.50SG.4. SUBMITTALS. Provide the following information to confirm compliance with the specification.

1. Complete description of all materials including the material thickness of all structural components of the frame and slide.
2. Installation Shop Drawings showing all details of construction, details required for installation, dimensions and anchor bolt locations.
3. Maximum bending stress and deflection of the slide under the maximum design head.

6.50SG.5. METHOD OF MEASUREMENT. This work will be measured as EACH Sluice Gate installed in accordance with the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

6.50SG.6. BASIS OF PAYMENT. The unit price bid for furnishing and installing the sluice gates must include all labor, materials, insurance, testing, and equipment necessary to complete the work. Sluice gates must be installed on the bridge concrete structures as per the Contract Drawings, and must be in accordance with and paid under Item 555.0105 Concrete for Structures, Class A of the NYS DOT Standard Specifications. No additional payment will be made for corrective actions. Cost of extended warranty and manufacturer’s on-site services and training must be included under sluice gate pay item.

Payment will be made under:

Item No.	Item	Pay Unit
6.50 SG1	FURNISH AND INSTALL SLUICE GATE (6’-0” X 4’-0” OPENING)	EACH

SECTION 6.50 TG – Furnish and Install Tide Gate

6.50TG.1. DESCRIPTION. Under this item, the Contractor will furnish and install new tide gates in locations shown on the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications.

6.50TG.2. MATERIALS.

(A) GENERAL

Gates must be as specified herein and have the characteristics and dimensions shown on the Contract Drawings.

- 1) Leakage must not exceed 0.1 gpm/ft of wetted seal perimeter in seating head condition.
- 2) The tide gate must utilize a resilient seal around the perimeter of the opening.
- 3) All structural components of the frame and flap must be fabricated of stainless steel and must have adequate strength to prevent distortion during normal handling, during installation and while in service.
- 4) All welds must be performed by welders with AWS D1.6 certification.
- 5) The Contractor must take special care to ensure that dissimilar metals of the tide gate, the mounting hardware and the concrete reinforcing rods are isolated.
- 6) Finish: Mill finish on stainless steel. Welds must be sandblasted to remove weld burn and scale.

The tide gates will be manufactured by the following or approved equal:

- 1) Whipps, Inc. Series 452
 - a. Address: 370 South Athol Road. Athol, MA 01331. USA.
 - b. Phone: +1 (978)-249-7924
 - c. Fax: +1 (978)-249-3072
 - d. Website: <https://whipps.com/>
- 2) Rodney Hunt Company
 - a. Address: 46 Mill Street. Orange, MA 01364. USA.
 - b. Phone: +1 (281)-962-6369
 - c. Email: sales@rodneyhunt.com
 - d. Website: <https://rodneyhunt.com/>
- 3) Waterman USA
 - a. Address: 25500 Road 204. Exeter, CA 93221. USA.
 - b. Phone: (559)-562-4000
 - c. Fax: (559)-562-2277
 - d. Email: ContractSales@WatermanUSA.com
 - e. Website: <https://watermanusa.com/>

All of the gates and associated equipment specified under this Section as well as for Section 6.50 SG, Furnish and Install Sluice Gate, herein, must be provided by a single manufacturer with a minimum of 7 years experience designing and manufacturing water control gates and must have at least 5 successful Pontoon Tide Gate installations.

Materials must meet the following requirements:

American Society for Testing and Materials (ASTM)

ASTM A 240/A240M-22a. Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Application.

ASTM A 276/A276M-17. Standard Specification for Stainless Steel Bars and Shapes

ASTM B584-22. Standard Specification for Copper Alloy Sand Castings for General Applications

(B) FRAME

The frame must be constructed of formed stainless steel plate with a minimum thickness of 3/8-inch

- 1) Frame design must be of the flanged back type suitable for mounting directly to a wall with stainless steel anchor bolts and grout. Mounting style must be as shown on the Contract Drawings.
- 2) The angle of the flap when seated against the frame must be between 3 degrees and 7 degrees from the vertical.

Lifting lugs must be provided on the top of the frame to facilitate installation.

(C) HINGE ARMS

Hinge arms must be constructed of formed stainless steel plate. Dual hinge arms must be provided on all tide gates.

- 1) The hinge pins must have a minimum diameter of 1-1/2 inch and must be constructed of solid stainless steel rod with bronze bushings.
- 2) Hinge Arms must be designed based on 4 times the loads incurred while the Pontoon Flap is held in a horizontal position by its lifting eye.
- 3) Easily accessible stainless steel grease fittings must be provided at all hinge points.

(D) FLAP

The flaps must be of welded stainless steel construction with Minimum metal thickness must be 1/4-inch.

- 1) The flap must not deflect more than 1/360 of the span under the maximum design head.
- 2) Reinforcing stiffeners must be welded to the flap.
- 3) A lifting lug must be provided on the bottom of the flap.
- 4) The manufacturer's name, opening size and maximum head rating must be etched or cut from a stainless steel plate and welded on the flap.

- 5) The Flap must be designed to open when the upstream head exceeds the downstream head by 0.5 feet.

(E) SEALS

All flap gates must be provided with a seal system to restrict leakage in accordance with the requirements listed in this specification.

- 1) A resilient seal must be mounted to the seating surface of the frame to restrict leakage.
- 2) The seals must be held in place by a stainless steel retainer and stainless steel attachment bolts. The attachment bolts must have a minimum diameter of 3/8-inch.
- 3) The seal system must be durable and must be designed to accommodate frequent operation without loosening or suffering damage.
- 4) All seals must be bolted or otherwise mechanically fastened to the frame. Arrangement with seals that are force fit and/or held in place with adhesives are unacceptable.
- 5) The seals must be mounted so as not to obstruct the water way opening.

(F) ANCHOR BOLTS

Anchor bolts must be provided by the flap gate manufacturer for mounting the gates when shown on the Contract Drawings.

- 1) Quantity and location must be determined by the gate manufacturer.
- 2) If epoxy type anchor bolts are provided, the gate manufacturer must provide the studs and nuts. Otherwise, the tide gates must be provided with stainless steel mounting bolts conforming to AISI 316.
- 3) Anchor bolts must have a minimum diameter of 3/4-inch with maximum 12" centerline to centerline spacing.

(G) ACCESSORIES.

Accessories will be provided by manufacturer.

6.50TG.3. CONSTRUCTION DETAILS.

(A) INSTALLATION

- a. Installation of the gates and appurtenances must be done in a workmanlike manner. It will be the responsibility of the Contractor to handle, store and install the equipment specified in this Section in strict accordance with the manufacturer's recommendations.
- b. The Contractor must review the Installation Shop Drawings and installation instruction prior to installing the gates. The self-regulating tide gates must be installed such that the invert of the self-regulating tide gate body matches the invert shown on the Shop Drawings.
- c. The gate assemblies must be installed in a true vertical plane, square and plumb.
- d. The Contractor must fill the void in between the gate frame and the wall with non-shrink grout as shown on the installation drawing and in accordance with the manufacturer's recommendations.

The tide gate manufacturer's representative must provide final inspection and certify that installation of the final gate is correct and in accordance with the manufacturer's requirements.

(B) TESTING

Contractor will make the following operation tests:

- 1) Tide gates must be tested for leakage on all four sides.
- 2) Tide gates must be tested to meet the differential pressure head requirements specified.

If any leakage exceeds these requirements or if the tide gate does not meet the differential pressure head requirements during the guarantee period of the contract, the Contractor must readjust, repair or replace the necessary parts and repeat the tests, all to the satisfaction of the Engineer and at the Contractor's expense.

The Contractor must arrange a final tide gate performance test in the presence of the Engineer. Each gate must be visually inspected to confirm that the flap seats against the frame properly. For all tests and inspections performed in the field, the Contractor must provide all tools and equipment necessary for safe entry into the confined space.

(C) SUBMITTALS

Provide the following information to confirm compliance with the specification.

- 1) Complete description of all materials including the material thickness of all structural components of the frame and flap.
- 2) Installation drawings showing all details of construction, details required for installation, dimensions and anchor bolt locations.
- 3) Maximum bending stress and deflection of the flap under the maximum design head (seating head).
- 4) The flap gate must be designed to withstand the maximum design head with a minimum safety factor of 4 with regards to ultimate tensile and a safety factor of 2 with regards to yield.
- 5) The location of the company headquarters and the location of the principal manufacturing facility. Provide the name of the company that manufactures the equipment if the supplier utilizes an outside source.

Detailed working drawings and descriptions of all tide gates and all necessary accessories must be furnished in conformance with the General Provisions of the Standard Specifications. 5 sets of drawings must be submitted to the Engineer for approval 3 weeks prior to the start of manufacturing. Manufacturing cannot start without the Engineer's written approval.

(D) WARRANTY

The Contractor must purchase an extended warranty from the manufacturer on the tide gates and related appurtenances of a length of 10 years from date of Substantial Completion. The Contractor will transfer ownership of warranty to DPR following completion of construction.

6.50TG.4. METHOD OF MEASUREMENT. This work will be measured by the size of the gate opening, and the number EACH of Tide Gates provided and installed in accordance with the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications.

6.50TG.5. BASIS OF PAYMENT. The unit price bid to furnish and install the tide gates will include the cost of all labor, materials, insurance, testing, and equipment necessary to complete the work in accordance with the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications. Cost of extended warranty must be included under tide gate pay item.

Payment will be made under:

Item No.	Item	Pay Unit
6.50 TG1	FURNISH AND INSTALL TIDE GATE, TYPE A (7'-6" X 6'-8" OPENING)	EACH
6.50 TG2	FURNISH AND INSTALL TIDE GATE, TYPE B (9'-2" X 6'-8" OPENING)	EACH
6.50 TG3	FURNISH AND INSTALL TIDE GATE, TYPE C (9'-2" X 8'-8" OPENING)	EACH

SECTION 6.64 BIN – Bridge Identification Number Sign (Wall Mounted)

6.64BIN.1. DESCRIPTION. The Contractor will furnish and install a sign structure mounted Bridge Identification Number (B.I.N.) Sign. The sign must be located at the north or east end of the bridge or if it is not orientated north or east then the end that is closer to east. The sign must be installed 3'-0" minimum above the finished ground.

6.64BIN.2. MATERIALS. The Bridge Identification Number (B.I.N.) Signs will consist of the following.

1. Aluminum Panel with Reflective Background: The aluminum panel and reflective background must conform to the material and fabrication requirements of NYSDOT Material Specification 730.01, Aluminum Sign Panels. The background material must be green reflective sheeting conforming to NYSDOT Material Specification 730-05.01. The size of the panels must be on 1/8" thick by 3" wide by 1'-6" long. The reflective sheeting used to form the background must be 3" wide by 1'-4" long.
2. Characters: The characters must be reflective sheeting conforming to NYSDOT Material Specification 730-05.01 except that the adhesive must be pressure-sensitive such that the characters can be applied to the background in the field. The characters must be 2" high and silver-white in color conforming to FHWA Series C dimensions. Prior to placing the cutout characters on the panel, the reflective background must be clean and free of dirt and oil which may adversely affect proper adhesion. The characters must be placed on the reflective background, perpendicular to the longitudinal axis of the panel, and vertically centered.

The reflective background and characters must be coated and the edge sealed in accordance with the recommendations of the sheeting manufacturer.

3. Expansion Anchors: 1/4" diameter by 1-1/2" long stainless steel nail drive expansion anchors meeting GSA Specifications FF-S-325, #3.2.5.2 will be used to attach the BIN Signs to concrete and stone surfaces.

6.64BIN.3. METHODS. Locate and install the Bridge Identification Number (B.I.N.) Sign in the location and using the expansion anchors as detailed above. Each Bridge Identification Number (B.I.N.) Sign must be installed with a minimum of 3 expansion anchors, set at 1" and 9" from the ends.

The format for the characters will be "BIN 2-XXXX-XX" for a total of 12 characters and one space. The "X" varies depending on the bridge BIN number of this contract.

6.64BIN.4. MEASUREMENT. The quantity to be measured for payment will be the number of EACH Bridge Identification Number (B.I.N.) Signs actually installed at the site to the satisfaction to the Engineer.

6.64BIN.5. PRICE TO COVER. The contract price bid per EACH for Bridge Identification Number (B.I.N.) Sign will cover the cost of all labor, materials, insurance, and equipment necessary to provide and install a Bridge Identification Number (B.I.N.) Sign; all as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

Payment will be made under:

Item No.	Item	Pay Unit
6.64 BIN	BRIDGE IDENTIFICATION NUMBER (BIN) SIGN	EACH

SECTION 6.82 RI - Removing, Storing, and Reinstalling Existing Traffic and Street Name Signs

6.82RI.1. DESCRIPTION. The work will consist of removing, storing, and reinstalling existing signs as specified locations on the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications.

6.82RI.2. MATERIALS AND METHODS.

Removal of signs must be done carefully in accordance with the requirements of Standard Specifications **Section 6.82** of the NYC DOT Standard Highway Specifications, except that removed signs must be delivered to the Contractor’s yard for temporary storage until needed for reinstallation. Any signs lost or damaged as a result of the Contractor’s operations must be replaced in kind by the Contractor, at no cost to the City. Signs with imperfections will need to be replaced at the discretion of the Engineer and be paid under Incidental Repairs Item 634.18370029.

All existing regulatory, informational, directional, and street name signs designated to be removed and replaced with temporary regulatory, informational, directional, and street name signs, must remain in place until immediately prior to their replacements, as directed by the Engineer, so as to avoid any disruption to vehicular and pedestrian traffic and the community.

No sign location must remain unsigned for any period of time beyond the working hours of the day of sign removal at that location.

When directed, the Contractor must deliver stored signs back to the site for installation in accordance with the requirement of Standard Specifications **Section 6.83** or **Section 6.86** of the NYC DOT Standard Highway Specifications, as applicable.

6.82RI.3. MEASUREMENT. The quantity to be measured for payment will be the number of SQUARE FEET of existing signs actually removed for reinstallation at the site as directed. The Contractor will be required to furnish all labor, materials, and incidentals required to remove, transport, store, and reinstall signs, when and where directed by the Engineer.

6.82RI.4. PRICE TO COVER. The contract price per SQUARE FOOT of signs must cover the cost of furnishing all labor, materials, plant, equipment, insurance and incidentals necessary to remove the existing signs, transport and store signs, and reinstall signs, all in accordance with the plans, the specifications and the directions of the Engineer. The cost must also include the supplying and sampling of bolts, nuts, clamps, brackets, and all necessary appurtenances as may be required. Temporary signs will be paid for under other contract items.

Payment will be made as follows:

Twenty percent (20%) of unit price per square foot bid will be paid for the area of sign removed and stored by the Contractor.

Eighty percent (80%) of unit price per square foot bid will be paid for the area of sign reinstalled at the site to the satisfaction of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
6.82 RI	REMOVING, STORING, AND REINSTALLING EXISTING TRAFFIC AND STREET NAME SIGNS	S.F.

Section 6.86 PISP – Furnish and Install Interpretive Sign Panel (DPR)

6.86PISP.1. DESCRIPTION. Under this section, the Contractor will furnish and install **INTERPRETIVE SIGN PANEL** in accordance with the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications

6.86PISP.2. MATERIALS. Unless otherwise specified herein, all materials must conform to requirements shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

- (A) Footings: Concrete for footings must be Class B-32, Type IIA and must comply with the requirements of **Section 3.05** of the NYC DOT Standard Highway Specifications.
- (B) Laminate Sign Panels: The sign must be a double sided digital high pressure laminate graphic panels 36"x24" manufactured using a Digital High-Pressure Laminate (dHPL) Printing Process. The front side graphic will be provided to the Contractor on a compact disc at the pre-construction meeting with the custom image in Illustrator 8.0 format. The back side color must be PMS 553c without text. Graphics, font type and size must be as shown on the Shop Drawings and/or the compact disc. Laminate sign panel must be manufactured by the following or approved equal:
 - a. Fossil Industries Inc.
 - i. Address: 44 Jefryn Blvd #C, Deer Park, NY 11729. USA.
 - ii. Phone: 631-254-9200
 - iii. Fax: 631-254-4172
 - iv. Email: info@fossilgraphics.com
 - v. URL: <https://fossilgraphics.com/>
 - b. iZone Imaging
 - i. Address: 2526 Charter Oak Drive #100, Temple, TX 76502. USA.
 - ii. Phone: 254-778-0722
 - iii. Fax: 254-778-0938
 - iv. URL: <https://izoneimaging.com/>
 - c. Folia by SH Immersive Environments.
 - i. Address: 110 Wellington St., Huntingdon, QC. Canada.
 - ii. Phone: 800-363-5304
 - iii. Email: info@theshgroup.com
 - iv. URL: <https://www.theshgroup.com/>

Printing must be extremely resistant to UV-rays, scratching, cracking and graffiti. All graffiti ink or paint marking must be readily removable with soap and water or solvents without harm. The panels must also be resistant to burning by cigarettes. The total panel thickness must be one-half (1/2") inch thick. The sign panels must display graphics on one side.

Digital graphic sign material is composed of several layers of phenolic resin impregnated kraft filler paper, a digitally imaged graphic, a layer of phenolic resin, surfaced by a layer of translucent exterior UV/graffiti overlay protection. The entire panel including exterior

overlay is bonded under heat and extreme pressure to form a composite panel. The finish must be matte, smoothly textured with reflectivity of 30 + or -5 gloss units. The graphics must be warranted for 10 years from the date of purchase against fading, delaminating and weather deterioration. In addition, the inks used must be able to withstand the heat-pressure process and be able to provide ten years of color integrity in outdoor exposure.

- (C) The fabrication of the Frame, Posts and Panel Attachments must be as shown on the Shop Drawings and described herein. The frame, post, and panel attachments must be CLCB3624IN as manufactured by iZone Imaging, Temple, TX, CDG224 as manufactured by Fossil Industries, Deer Park, NY, Cantilevered Frameless #1 Style as manufactured by Pannier, Gibsonia, PA or approved equal. The opening for knee clearance must be minimum 2'-6" x 2'-6" to meet ADA compliant clearance. The anchor posts must form a 115 degree angle to the mounting post creating one continuous cantilevered post.

Posts must be constructed of square cantilevered 3" x 3" x 1/8" aluminum tube construction with powder coat finish. Color must be PMS 553c and must match the color of the back side of the dHPL sign.

Bracket must be 1" welded mounting bracket constructed of construction grade aluminum and powder coated in PMS 553c to secure sign panel. Fasteners must be 1/4" – 20 stainless steel blacked tamper resistant machine screws.

Panels must be drilled and tapped w/ second surface holes for fasteners to align w/ mounting bracket. Fasteners must not be visible from face of sign.

6.86PISP.3. METHOD. The location of INTERPRETIVE SIGN PANEL (DPR) must be as shown on the drawings, and as directed by the Engineer. The sign must be attached to the posts with three (3") inch long continuous threaded studs inserted into the one-quarter (1/4") inch threaded holes. The tamper resistant locknuts must be tightened so the sign is secure. The sign must be installed in a true vertical position in a concrete footing, attached as shown on the drawings. The decorative surface must be cleaned with warm water and mild soap after installation. On minor damage surface, caused by installation or transportation etc., touch-up finish in conformance with the manufacturer's recommendations. Provide touch-up such that the repair is not visible from a distance of six (6') feet. After installation, stud must be cut so not more than one-quarter inch (1/4") protrudes beyond the lock nut.

6.86PISP.4. SUBMITTALS. The Contractor must make submittals in accordance with the following:

- (A) Shop Drawings: The Contractor must submit shop drawings of mounting details and electronic layout proof for sign graphics at least 60 days prior to installation.
- (B) Graphic Color Samples: The Contractor must submit a minimum 8" x 8" sample of the finished graphic at least 1/16" thick to ensure the color of the graphic matches the file provided. One representative sample for interpretive and one for wayfinding sign must be submitted. The sample must include a section of the sign that includes a graphic and text at 100% of their final size. The Contractor may need to provide a collage to ensure that both a graphic and text area is shown.
- (C) Warranty: The Contractor must submit a manufacturer's warranty for the Digital High-Pressure Laminate (dHPL) listing a minimum ten (10) year guarantee against UV fading, delaminating and weather deterioration. The manufacturer will replace the

product within the warranty period as necessary to meet those requirements at no cost to the City.

6.86PISP.5. PRICE TO COVER. The price bid will be per **EACH** sign and will include the cost of all labor, material, equipment, insurance, including Sign, Frame, Posts and Panel Attachments, painting, unclassified excavation, average concrete footings and all incidental expenses necessary to complete the Work in accordance with the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

Payment will be made under:

Item No.	Item	Pay Unit
6.86 PISP	FURNISH AND INSTALL INTERPRETIVE SIGN PANEL (DPR)	EACH

The Section below supersedes and replaces Section 7.13 of NYC DOT

Standard Specifications dated May 16, 2022

SECTION 7.13 – Maintenance of Site

7.13.1. DESCRIPTION. This section describes the maintenance, protection, and cleanup of the construction site. The Contractor is placed on notice that a safe and clean site throughout all phases of the work and during all operations must be provided by the Contractor, and further that the monitoring by the City of the Contractor's site maintenance, site protection and site cleanup is considered for the purposes of the contract to be a Project objective necessary to eliminate and/or mitigate public disruption and inconvenience, and to insure public health and safety. The Contractor shall therefore, at all times, conduct this operation in a manner which promotes a clean site and ensures the convenience, safety and health of general users consisting of, but not limited to, the motorist, the pedestrian, and the abutting property owners/tenants, as well as those of the Contractor's employees. This includes compliance with the Contractor Code of Conduct in **Section 1.06.19**.

The provisions of this section are supplementary to and do not abrogate the General Conditions (Section 1.06) or the General Notes on the Contract Drawings relating to the protection and cleanup of the site, and the delivery and storage of materials at the site. Furthermore, any conditions pertaining to the maintenance, protection, and cleanup of the construction site during the life of the contract which are addressed in the General Conditions and in the General Notes on the Contract Drawings, whether or not addressed under this Section, shall be deemed as having been addressed under this Section.

7.13.2. METHODS.

(A) GENERAL

Work under this Item shall start from the date of written notice to commence work or from the actual start of construction work at the site, whichever is later.

The Contractor shall be responsible for the maintenance of the contract streets or portions of streets pursuant to Article 7 of the Standard Construction Contract.

The Contractor shall provide the necessary personnel and equipment for adequate site maintenance within and adjacent to the contract site and all detour routes. The Contractor shall keep the work site and adjacent areas free and clean from all rubbish, debris, dust, idle construction equipment, discarded or leftover construction material and excavated material as outlined below. The Contractor shall also keep all haul routes outside the work site free and clean from all rubbish, debris and dust resulting from the Contractor's operations.

The Contractor shall protect the public from damage to persons and property, which may result directly or indirectly from any construction operation. Such protection shall include, but not be limited to, providing proper street drainage and diversion of runoffs from private properties by such means as sandbagging or pumping, controlling soil erosion and/or soil migration.

All existing Fire Department Communication facilities shall be protected, and provisions made for their continuous operation during construction. **ALL ALARM BOXES AND POSTS MUST REMAIN ACCESSIBLE.** If, due to the Contractor's operations, Fire Alarm Service is inadvertently interrupted or Fire Communication System equipment or facilities are damaged, the Contractor will be held responsible and shall replace them at its own expense and in accordance with Fire Department requirements.

The Contractor shall be fully responsible for maintaining the completed work in an acceptable condition and protecting the completed work until relieved of such responsibility by acceptance of the contract or the completed items of work. Upon completion of each phase of work, or when ordered by the Engineer, and before acceptance and final payment are made, the Contractor shall remove all surplus and discarded material, rubbish, equipment, debris, and temporary structures from the site, and restore the working site as directed by and to the satisfaction of the Engineer. All sewers, water mains, appurtenant structures, etc., shall be clean, free from debris and deposits.

(B) MAINTENANCE OF STREETS

Maintenance of streets and detours for vehicles shall include any repairs, as directed, including the filling of pre-existing and new potholes that may be necessary due to usage of streets by traffic. This repair work will be paid for under Item No. 4.02 CB - ASPHALTIC CONCRETE MIXTURE, or 4.02 CA - BINDER MIXTURE, as provided in the Bid Schedule.

Also, the Contractor shall provide reasonably safe and convenient walkways and passageways for pedestrian traffic. Where required by the Contract Documents or when ordered by the Engineer, the Contractor shall construct and maintain, as directed, temporary asphalt walkways and ramps in accordance with the requirements of Subsection 7.13.2.(G)(1), below, temporary wood plank or steel plate ramps or other configurations and materials, as may be required, and provide temporary pedestrian passageways (as per the NYC Department of Transportation's Standard Details of Construction, Standard Drawing H-1004, or as otherwise approved). The Contractor shall make the surface(s) of the pedestrian pathway(s) safe by eliminating ponding conditions, removing debris, sweeping, and wetting for dust control. All walkways and passageways must be in compliance with all ADA requirements.

The Contractor shall maintain access to all abutting properties and pedestrian usage of sidewalk areas, both old and new, at all times, as directed by the Engineer and as shown on the Contract Drawings, except at "Sidewalk Closings" as designated or as directed.

The Contractor shall maintain the traveled way in such a condition and conduct operations in such a manner that snow, and ice may be readily removed by others as and when necessary, and in such a manner that proper drainage is provided for the melting of snow in the banks resulting from normal plowing. However, the Contractor will not be responsible for snow or ice removal on the pavement or traveled way opened for public usage, except within the limits of the work zone(s) which may include, but is not limited to, stairway, promenades, esplanade areas, and sidewalk, including those fronting the Contractor's office and the Engineer's field office all of which will be the responsibility of the Contractor. In order to minimize the amount of salts entering the storm sewer system, snow melt must not be used in place of shoveling, but must be used after all standing snow is removed. This does not prohibit applying reasonable amounts of snow melt prior to snowfall.

(C) CONTROL OF DUST AND DEBRIS

The Contractor shall control dust and debris within the work area and the traveled way. The Contractor shall mitigate material spilling from trucks with the use of tarpaulin covers. All dust producing materials shall be wet down with water to the extent necessary to minimize dust. When public or local inconvenience is caused by dust occasioned by the sweeping and cleaning operations, the Contractor shall furnish and sprinkle water onto the affected surfaces during the sweeping and cleaning operations; however, the application of water shall not be used as a substitute for sweeping.

The Contractor shall perform all work operations so that dust and debris is minimized within the work zone and mitigated before any of it leaves the work zone. Movement of dust and debris by wind, vehicles, persons, and the Contractor's operations shall be cause for sweeping and watering to be implemented immediately as directed by the Engineer. Also, should dust and dirt cover over all or portions of the work site it shall also be cause for immediate sweeping and watering by the Contractor.

All water furnished and applied under this item shall be free from harmful materials and shall be reasonably clean. Water shall be delivered in tanks or tank trucks, or by use of hydrants as permitted by the Department of Environmental Protection; however, no guarantee is made by the City as to the availability of suitable hydrants at the site. Where no suitable hydrants exist at the site, the Contractor shall be required to furnish water in tanks or tank trucks at no additional cost to the City.

(D) CLEANING OF SITE AND WASTE DISPOSAL

The Contractor shall be responsible for the removal of all rubbish and debris from the site of the project. The Contractor shall remove all piles of rubbish, debris, waste material and wood cratings as a result of the Contractor's operations as they accumulate. When directed by the Engineer the Contractor shall cart them away from the site. The Contractor shall employ and keep engaged for this purpose an adequate force of laborers.

The Contractor shall at the beginning and end of each day be required to pick up all litter, trash, and debris (excluding garbage and recycled material set to be picked up by scheduled private and/or public sanitation pickups) adjacent to and within the work zone on a daily basis, seven (7) days a week. The Contractor shall also during the day keep clean all roadways, sidewalks and other places in which the work is being performed or which are to be used in connection therewith.

The Contractor shall protect the site against unauthorized dumping of waste materials by patrolling the site and reporting violations to the Engineer, and should any unauthorized dumping occur, it shall be immediately removed by the Contractor to the Engineer's satisfaction.

While performing the above site cleaning work, the Contractor shall have available an approved mechanical street sweeper, with operator, suitable for removing dirt, debris, dust and loose stones; a sprinkler truck; adequate size pick-up truck with driver and laborers; an adequate supply of brooms, sixteen (16) inch wide or larger; and necessary hand tools and materials. The Contractor shall arrange to have necessary persons and equipment assigned to satisfy concerns relating to required clean up and restoration work. These persons with equipment shall be available to correct all matters requiring attention and shall be immediately available to respond to directives issued by the Engineer regarding specified problems of maintenance and cleaning.

The Contractor shall perform this work during the normal or extended working days. However, when required in accordance with the approved schedule or directed, the Contractor shall be prepared to extend this work beyond the normal workday, including weekends.

The Contractor shall provide trash receptacles for use by its construction staff. The trash shall be periodically removed and disposed of in compliance with local ordinances.

(E) DISPOSAL OF REMOVED MATERIALS

Except as may be otherwise specified herein or in the General Conditions, all materials which are permanently removed from the existing construction by the Contractor in accordance with the Contract Documents shall become the Contractor's property and shall be disposed of by him away from the site.

In addition, it is the intent of NYCDDC to have all metals that are excavated and removed from the site, such as iron castings street hardware (i.e., manhole frames and cover, valve box covers, hydrants, etc.), ductile iron sewer pipe, steel and ductile iron water main pipe, trolley track rails, etc. (excluding steel reinforcement embedded in concrete), recycled provided that they are not deemed contaminated or hazardous. Therefore, the Contractor shall agree to make every effort possible to recycle said metals removed from the site. As a record of such compliance, the Contractor shall be required to keep an accurate log of said materials that are excavated and removed from the site and where and how said materials are either processed for reuse or disposed of away from the site. A copy of said log shall be submitted to the Engineer along with the invoice submitted by the Contractor for payment each month.

(F) REMOVAL OF SURPLUS PLANT AND EQUIPMENT

When ordered by the Engineer, the Contractor shall be required to promptly move from any location within the contract area all such items of plant and equipment determined to be no longer necessary for the effective prosecution of the work at such point, to other locations to be designated by the Engineer. If, in the opinion of the Engineer, plant and equipment are no longer required on any portion of the work, they shall be removed from the site when so ordered.

Where access to regularly scheduled private and/or public sanitation pickups, such as garbage and recycled materials, is blocked due to the Contractor's operations, the Contractor shall coordinate a schedule for collection of said materials, and/or shall collect and transport garbage and recycled materials to collection points, as directed by the Engineer, for disposal by public or private collections, as appropriate.

Waste material shall not be dumped in or on any part of the City's property except by special permission of the Engineer. Concrete mixing trucks shall not be washed on City streets nor shall the waste material from the washing out of concrete mixing trucks be discharged to any street, public property, sewer manhole, catch basin, sewer, street gutter, or other above or below ground structures. All excavated materials falling on roadways and sidewalks shall be promptly swept up and removed.

(G) MAINTAINING ACCESS TO PROPERTIES AT CUT AND FILL LOCATIONS

When it is necessary to cut or fill at abutting properties in accordance with the contract requirements, the Contractor shall immediately commence construction to provide entrance to and egress from said properties as shown on the Contract Drawings and/or by one of the following methods, or modifications made thereto, when so ordered by the Engineer:

(1) "Asphalt Ramps"

Temporary access ramps shall be made hard and smooth surfaced with asphaltic material (to be paid for under Item No. 4.02 CB or 4.02 CA, as provided in the Bid Schedule) The slope of temporary ramps at driveways and transition areas shall be approximately 25% [approximately a three (3") inch rise in one (1') foot] and be limited to a width of not more than eight (8') feet for single driveways and not more than twelve (12') feet for double driveways. The slope of temporary ramps at street hardware shall range between 1:10 and 1:6 (rise:run). The slope of temporary pedestrian ramps shall be limited to a width of not less than four (4') nor more than five (5') feet and a slope of approximately 1:12.

(2) "Benching"

In locations where embankments are to be constructed on existing slopes or against existing embankments with slopes steeper than 1 (vertical) on 3 (horizontal), slopes shall be benched as shown on the Contract Drawings. Benches shall be constructed as a "Temporary Retaining Wall" (Item No. 8.12). Access to abutting properties shall be provided as shown on the Contract Drawings or as per the details shown on the NYC Department of Transportation's Standard Details of Construction, Standard Drawing for Temporary Wooden Steps (Item No. 7.15).

(3) "Specified"

By methods specified and detailed on the Contract Drawings.

(H) FINAL CLEARANCE OF SITE

Immediately after the completion of the contract and before final acceptance of the Work by the Department, the Contractor shall remove all surplus material, temporary structures, and debris resulting from the Contractor's operations. Any painted markings (layout survey, etc.), excluding utility markings made under 16 NYCRR Part 753 (utility markings made under Part 753 shall not be removed), that have been placed by the Contractor and which are still remaining at the end of the contract shall be removed. Removal of painted markings shall be done using an approved power-washing method. The entire area shall be cleared and left in a neat presentable manner satisfactory to the Commissioner.

If as a result of the Contractor's operations, obstructions have fallen into a navigable waterway, they must be removed and the waterway and channel cleared; and the Contractor must obtain a release from the United States Coast Guard.

7.13.3. STORAGE OF MATERIALS AND EQUIPMENT. Roadways, sidewalks, gutters, crosswalks, and driveways shall at all times be kept clear and unobstructed unless a permit has been obtained from NYC Department of Transportation authorizing encumbrance of the roadway and/or sidewalk with equipment and/or material, provided it is in a manner which will not prevent the safe passage of vehicular traffic on such roadway designated to remain open, or the safe passage of pedestrians on such sidewalk and crosswalks, or block the normal drainage flow within the streets.

(A) DELIVERED MATERIALS NOT TO OBSTRUCT TRAFFIC

All materials delivered upon but not placed in the work shall be neatly piled so as not to obstruct public travel and shall be removed from the line of the work, at the direction of the Engineer, at no additional cost to the City. Unless the materials are so removed by the Contractor upon notice from the Engineer, the materials may be removed by the Commissioner and the expense thereof charged to the Contractor.

(B) PILING OF MATERIALS DELIVERED TO WORK SITE

Materials placed on the sidewalk or roadway shall be piled or stacked in a satisfactory and safe manner, enclosed with plastic barrels (Section 6.87) or barricades (Section 6.28 AA or 6.28 BA), and with pedestrian steel barricades (Section 7.36), "WARNING: KEEP OUT" signs (Section 6.25), and heavy duty safety orange construction fencing. The heavy duty safety orange construction fencing shall be safety orange in color, of heavy duty construction grade flexible plastic (light duty plastic screening fence will not be accepted), have a minimum height of four (4') feet, and shall be of a type approved by the Engineer. The heavy duty safety orange construction fencing shall be held vertically in place for its full length and shall be securely attached to barrels, utility poles, or a combination thereof, or other traffic control devices shown on the Contract Drawings or directed, in a manner approved by the Engineer. Loose materials shall be covered with tarpaulins, suitably held down. Areas adjacent to stored materials shall be kept clean and watered as required and as directed by the Engineer. When such materials are removed, the sidewalks and roadways must be immediately swept clean by the Contractor and control of dust shall be mitigated in accordance with the requirements of Subsection 7.13.2.(C), above.

Materials to be used in the work shall be compactly piled within limits to be designated by the Engineer. Sand and coarse aggregate may be piled within the roadway area. All old and such new material as has been approved, except sand and coarse aggregate, shall be neatly piled by the Contractor on the front half of the sidewalk, on planks or plates, if the same be flagged or otherwise improved.

Stored material shall be neatly stacked, placed at locations designated by the Engineer, and suitably enclosed or covered, protected, and wet down, as stipulated above. Streets under such construction material or equipment shall be shielded by wooden planking, skids or other protective covering approved by the Engineer. All pipes, fittings and appurtenances must be carefully stored, as approved by the Engineer, so as to prevent surface drainage, excavation material or other foreign matter from entering into the pipes, fittings and appurtenances.

Waste material and excavated material will under no conditions be permitted to remain on the work site or

Provisions must be made by the Contractor to maintain curb-line drainage through storage areas. Stored materials shall not block the normal drainage flow or cause ponding conditions within streets and shall not be placed within fifteen (15') feet of any fire hydrant (working or not), at bus stops, within tree root zone areas, or any other areas as set forth in the rules of the department the obstruction of which would impair the safety or convenience of the public (also see General Notes on Contract Drawings for any additional information). In a street upon which there is a surface railroad, construction materials or equipment shall not be placed nearer to the track than five (5) feet.

The Contractor shall not be permitted to store, stockpile or lay down any construction material within the boundaries of tree pits or critical root zone (CRZ) of existing trees. This material includes but is not limited to lumber, fuel and oil containers, pipes, pipe fittings, barricades, hand tools, hoses, hardware, bricks, salvaged stone or granite, trash receptacles, or asphalt. Bulk material, equipment, or vehicles shall not be stockpiled or parked within the CRZ of any tree, or within ten (10') feet of the trunk (whichever is greater). This is done to minimize surface and subsurface root and soil compaction. This applies to all CRZs within or outside the project limit line. CRZ is calculated as $(DBH \times 1.5 \text{ ft} = \text{Radius})$. The radius calculation is equal to the critical root zone.

When no work is in progress, at least one half of the roadway must be left clear at all times.

The Contractor must remove any stored materials/equipment from the project street(s), as directed by the Engineer, within forty-eight (48) hours' notice, at no additional cost to the City. Payment for compliance with such a directive shall be deemed included in the unit price bid for this "Maintenance of Site" item.

(C) ILLUMINATION OF BUILDING MATERIAL AND EQUIPMENT ON STREETS

Pursuant to Section 19-121 of the Administrative Code of the City of New York, the Contractor's attention is directed to the following:

1. Whenever a permit is issued for any construction material or equipment, the outer surface of such construction material or equipment shall be clearly marked with high intensity fluorescent paint, reflectors, or other marking which is capable of producing a warning glow when illuminated by the headlamps of a vehicle or other source of illumination.
2. Each approved storage area shall have at least one (1) sign identifying the Contractor's name, Project ID/Name, and the phone number of the Engineer's Field Office.
3. Violations. Any person who shall violate any of the above provisions, upon conviction thereof, shall be subject to the Criminal penalties pursuant to Section 19-149 of the Administrative Code of the City of New York or Civil penalties pursuant to Section 19-150 of the Administrative Code of the City of New York, or both such fines and imprisonment.

(D) STORAGE WITHIN THE PROJECT LIMITS

The Contractor will not be permitted to store construction equipment, construction material or excavated material within the project limits, except where specifically approved by the Engineer and only under the following conditions:

The Contractor will not be permitted to allow the personal vehicles of the Contractor's work force to be stored, parked, or to stand within the limits of any designated work area or in "no parking", "no standing", and/or other restricted zones; vehicles so stored, parked, or found standing may be ticketed and/or towed at the owner's expense. This restriction shall exclude Contractor owned vehicles transporting and/or storing specialized equipment and/or materials necessary for the execution of ongoing contract work, as approved by the Engineer. The Contractor shall be responsible for properly notifying the Contractor's work force of these restrictions.

Payment for traffic control devices such as plastic barrels, barricades, pedestrian steel barricades, and warning signs used to enclose stored materials and equipment within the project limits will be paid for under the appropriately scheduled items; however, when no appropriately scheduled item or items are provided in the bid schedule, the cost of those items shall be deemed included under all scheduled items.

Materials stored on site shall be "Installed in Place" within two (2) consecutive working days of delivery to the job site, unless otherwise specified or permitted by the Engineer. (Construction supervisor will be required to maintain accurate records of all delivery dates.) No material shall be stored on site during construction shutdowns and/or stoppages scheduled to last more than five (5) consecutive working days.

(E) STORAGE OUTSIDE THE PROJECT LIMITS

The Contractor may be permitted to occupy off site street/roadway areas for material storage, subject to their availability and conformance with City wide permitting requirements for storage of materials; however, this neither implies nor guaranties the Contractor the availability and/or approval of any off site street/roadway areas.

Materials and/or equipment must be stored safely and neatly as specified above, with appropriate Maintenance and Protection of Traffic devices separating the storage area from vehicular traffic and pedestrians. Loose materials must be properly and neatly stored.

No separate payment will be made for providing off site storage site(s) where approved or for providing any traffic control devices used for off-site storage, the cost of which shall be deemed included under all scheduled items.

7.13.4. NONCONFORMANCE. No payment will be made under Maintenance of Site for each calendar day during which there are deficiencies in compliance with the foregoing specification requirements, as determined by the Engineer and made evident by the Engineer's failure to sign documents each day approving payment to be made under this item.

The amount of such calendar day non-payment will be determined by dividing the unit price bid per month by thirty (30).

If the Contractor fails to maintain and protect the site, or any portion thereof, adequately and safely for a period of three (3) or more consecutive hours, the Engineer may correct the adverse conditions by any means deemed appropriate, including, but not limited to, "outside services," and shall deduct the cost of the corrective work from any monies due the Contractor. The cost of this work shall be in addition to the nonpayment for site maintenance listed above.

However, where continued nonconformance with the requirements of this specification is noted by the Engineer, and prompt Contractor compliance is deemed not to be obtainable, all contract work may be stopped by direct order of the Engineer, regardless of whether corrections are made by the Engineer as stated in the paragraph above.

Furthermore, in addition to the remedies specified above, in the event the Contractor shall fail to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of the contract and the specifications in the matter of providing facilities and services for the maintenance, protection and cleanup of the construction site, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum shown per calendar day in Schedule A, for each instance of such failure, as liquidated damages and not as a penalty, for such default.

Any money due the City of New York under this provision shall be deducted from the amounts due or to become due to the Contractor for work performed under the contract.

7.13.5. MEASUREMENT.

(A) MAINTENANCE OF SITE (LUMP SUM)

Payment will be made by lump sum.

(B) MAINTENANCE OF SITE (PER MONTH)

The quantity to be measured for payment under this item shall be the number of months (to the nearest 1/4 month increment) that the Contractor satisfactorily provides for the Maintenance of Site in accordance with these specifications, including winter shut down, holiday embargo, and other work suspension periods for which the Contractor remains responsible for site maintenance. Measurement for this item shall not begin until actual construction work is started at the site.

Periods where the Contractor is demobilized and not continuing the site maintenance will not be measured for payment. The Engineer will provide written notice two weeks in advance that the Contractor is being deemed to be demobilized. For the avoidance of doubt, reduced activity during winter shutdowns, holiday embargos, and other work suspension periods as shown on the Contractor's approved CPM schedule do not count as demobilization, provided the Contractor continues to be responsible for site maintenance and responsive to notifications of nonconformance per **Subsection 7.13.4** above. Should such nonconformance occur during periods of demobilization, the liquidated damages described in **Subsection 7.13.4** above may be assessed during periods where maintenance of site is not being measured for payment.

In order to incentivize early completion, the City agrees to share the savings resulting from the reduction of the quantity measured for payment under this item.

If the determination of Substantial Completion is reached at least two (2) months earlier than the Substantial Completion date set forth in the Notice to Proceed letter, plus any approved time extensions, the Contractor and the City will evenly split the saved amount. This payment will be in addition to any payments of incentive for early completion if one is specified for the Project.

For example, using a contract with a 30-month duration for achievement of substantial completion, the following would apply under these two scenarios:

1. Project substantial completion is achieved in 28.5 months: Because the contract was completed within two (2) months of the scheduled substantial completion date, the contractor is entitled to be paid the 28.5 month project duration for the Maintenance of Site, with no additional amounts due to the contractor from any savings.
2. Project substantial completion is achieved in 26 months: Because the contract was completed more than two (2) months prior to the scheduled substantial completion date, the contractor is entitled to be paid the 26 month project duration plus half of the four months saved, amounting to 28 months to be paid to the contractor for the Maintenance of Site.

7.13.6. PRICE TO COVER.

(A) MAINTENANCE OF SITE (LUMP SUM)

The lump sum price bid for Maintenance of Site shall include the cost of furnishing all labor, materials, plant, equipment, insurance and incidentals required to maintain, protect and clean up the site, all in accordance with the Contract Drawings, these specifications, and the directions of the Engineer. Payment will be made in proportion to the percentage of actual contract completion. The final payment for this item will be in direct proportion (whether higher or lower) to the final contract value as compared to the original contract value.

(B) MAINTENANCE OF SITE (PER MONTH)

The unit price bid per month for Maintenance of Site shall include the cost of furnishing all labor, materials, plant, equipment, insurance and incidentals required to maintain, protect and clean up the site, all in accordance with the Contract Drawings, these specifications, and the directions of the Engineer.

Where no separate item is provided for this work, the cost thereof shall be deemed to be included under all scheduled items.

Payment will be made under:

Item No.	Item	Pay Unit
7.13 A	MAINTENANCE OF SITE	L.S.
7.13 B	MAINTENANCE OF SITE	MONTH

SECTION 7.35 - Pedestrian Channelizer

7.35.1. INTENT. This section describes the work of providing interlocking pedestrian channelizers to be used as temporary pedestrian access route between pedestrian and construction work areas when directed by the Engineer.

Pedestrian channelizer must provide the same level of pedestrian guidance as concrete or plastic barrier, but should be light weight, easier to transport, install and remove with interlocking arrangements.

7.35.2. MATERIALS. The work shall consist of furnishing, maintaining, relocating, and removing pedestrian channelizer in sidewalk areas as per the specifications, as shown on the Contract Drawings or where otherwise directed by the Engineer.

Pedestrian Channelizer units must meet the requirements of the following standards:

- a. 2010 ADA Standards for Accessible Design
- b. 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG)
- c. 2009 Manual on Uniform Traffic Control Devices (MUTCD), with FHWA Revisions and NYS Supplements

Product should meet the crash test and evaluation criteria contained in the American Association of State Highway and Transportation Officials' (AASHTO) Manual for Assessing Safety Hardware (MASH) and have a FHWA acceptance letter.

Acceptable products include:

- a. ADA PEDESTRIAN BARRICADE – STRONG WALL by PLASTICADE
- b. ADA COMPLIANT PEDESTRIAN BARRICADE like Safety Rail & SafetyWall by PSS
- c. Urbanite 57000 Series by Urbanite
- d. Plastic Safety System Safety Wall by PAUL PETERSON SAFETY DIVISION.
- e. Or approved equivalent

Battery operated flashing units as approved by the Engineer.

7.35.3. METHODS. Pedestrian Channelizer units of the various sizes required shall be furnished to the site, complete, ready to use. All units shall be in good condition and acceptable to the Engineer. pedestrian channelizer installed must meet the requirements of the standards listed in **Section 7.35.2** above.

The Contractor shall install pedestrian channelizer by placing them where shown on the Contract Drawings or where otherwise directed by the Engineer. Adjacent units shall be interlocked. Weights (sand or water ballast in the unit, sandbags, concrete blocks, etc.) must be used per the manufacturer's recommendations, as necessary to ensure stability, or as directed by the Engineer. Weights must not interfere with pedestrian travel. The minimum number of interlocked barricade units in a given run must be two, unless otherwise approved by the Engineer. Where less than three units are required and approved by the Engineer, additional measures shall be taken by the Contractor to stabilize the shorter length of interlocking barricade and prevent overturning.

At corners, units four feet or less in length must be used to form smooth curved runs of barricade.

Contractor shall continuously maintain the temporary pedestrian steel barricades, where shown on the Contract Drawings or directed by the Engineer, until ordered by the Engineer to remove the barricades at the completion of a work stage. Should a unit or units of barricades become damaged or otherwise unacceptable to the Engineer, the Contractor shall replace said units within twenty-four (24) hours of notice by the Engineer, at no additional cost to the City.

Battery operated flashing units will be installed on every alternate pedestrian channelizer or as approved by the Engineer.

7.35.4. MEASUREMENT. The quantity to be measured for payment shall be the number of linear feet of pedestrian channelizer constructed and placed, complete, based upon the summation of the lengths of the individual units so constructed and placed.

Payment will be made for only the initial installation at any location. Whenever pedestrian channelizer are moved to a new location, as required by the Contract Drawings or directed by the Engineer, payment will be made in the same manner as if it were an initial installation. Whenever the Contractor proposes to move pedestrian channelizer to a new location it is subject to approval of the Engineer and must be in accordance with the latest approved progress schedule. Minor movement of the pedestrian channelizer within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment. Minor movement within a work area includes, but is not limited to

- Movement from one side of the roadway to the other side
- Movement to adjust the roadway or work zone width
- Movement required to access the work zone or to secure the work zone
- Linear movement of less than one block within an established work zone
- Rearrangement within a work area

No payment will be made: for non-interlocked units of barricade; for barricade units greater than four (4') feet in length used in corner quadrants; for movements of pedestrian channelizer made for the Contractor's convenience; for movement of barricades at a given location at the end of a work period and subsequent replacement at the same location at the beginning of the next work period; for movement of barricades at a given location during a work period and subsequent replacement at the same location during the same work period; or for the interchanging of barricades between initial installations.

7.35.5. PRICE TO COVER. The contract price bid per linear foot for PEDESTRIAN CHANNELIZER will cover the cost of furnishing all labor, materials, plant, equipment, insurance, battery operated flashing units and necessary incidentals required to furnish, install, maintain, relocate, and remove PEDESTRIAN CHANNELIZER, complete with weights for stability, in accordance with the Contract Drawings, the specifications, and the directions of the Engineer.

Where there is no scheduled item for temporary Pedestrian Steel Barricades, the cost of furnishing, installation, maintenance, relocation, and subsequent removal of PEDESTRIAN CHANNELIZER as required will be deemed included in the unit price bid for the Maintenance and Protection of Traffic Item.

Payment will be made under:

Item No.	Item	Pay Unit
7.35	PEDESTRIAN CHANNELIZER	L.F.

SECTION 8.53 BFR - Bridge Flag Repair

8.53BFR.1. INTENT. This work will consist of the repair of all flagged conditions (Safety and Structural) as deemed necessary by DDC's Assistant Commissioner of Construction during the life of the contract.

8.53BFR.2. DESCRIPTION. A flagged condition is defined to be a deficient condition identified during construction as requiring extra work to facilitate maintenance and protection of both vehicular and pedestrian traffic.

Flagged repairs may include, but are not be limited to:

- A) Shifted or collapsed sections of substructure;
- B) City-owned utility repairs; and,
- C) Parapet coping adjustments.

Such extra City work must be paid for under this item in accordance with the requirements of Article 26 in the Standard Construction Contract dated March 2017.

Payment made under this Fixed Sum item will cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the City work as ordered by DDC's Assistant Commissioner of Construction.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any extra work performed by the Contractor, as directed by DDC's Assistant Commissioner of Construction.

Payment will be made under:

Item No.	Item	Pay Unit
8.53 BFR	BRIDGE FLAG REPAIR	FIXED SUM

SECTION 9.10 TES Temporary Excavation Support System

9.10TES.1. DESCRIPTION This section describes methods of providing temporary excavation support system (TESS) during construction within the influence lines of adjacent structure foundations.

Under this work, the Contractor must design, furnish, place, maintain and cutoff a Temporary Excavation Support System (TESS) at locations shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications Details of the TESS must conform to the requirements of Federal and Local Regulations.

Temporary excavation support must be defined as soldier pile and lagging system, timber and steel sheeting or other acceptable approved methods, which is designed to prevent ground movement and loss of soil adjacent to structures. The requirements of any support system must be as contained in the following:

- (A) Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction (OSHA),
- (B) Industrial Code Rule 23 - "Protection of Persons Employed in Construction and Demolition Work"
- (C) 16NYCRR Part 753 of the Industrial Code - "Protection of Underground Facilities" of the State of New York, Department of Labor, Board of Standards and Appeals

The Contractor must be responsible for design of a Temporary Excavation Support System (TESS) by a New York State Licensed Professional Engineer and the method of installing the TESS must be submitted to the Engineer for approval.

9.10TES.2. MATERIALS The selection of TESS materials must be the Contractor's option subject to approval of the Engineer.

Materials must comply with the following requirements:

- (A) Temporary Timber Sheeting. Timber sheeting must be new or used and consist of any acceptable species which can be placed satisfactorily. The sheeting must have a preservative treatment conforming to the American Wood-Preservers Association (AWPA) Standard C-2, Soil Contact. Actual cross section or stress grading and acceptance must be in accordance with the requirements and provisions of **Section 2.39** of the NYC DOT Standard Highway Specifications. The timbers must be sound and free from any defects which might impair its strength or tightness. The materials must include all necessary waling and bracing required.
- (B) Temporary Steel Sheeting. Steel sheeting must conform to the requirements of **Section 2.35** of the NYC DOT Standard Highway Specifications except that the steel must conform to ASTM A328. If Contractor intends to incorporate previously used steel sheeting into the work, he/she must submit certification by a qualified Professional Engineer licensed in the State of New York that the material conforms to ASTM A328 and is in serviceable condition. Waling and bracing must conform to the requirements of ASTM A36 and **Section 2.35** of the NYC DOT Standard Highway Specifications. The Contractor must furnish to the Engineer, certified copies of physical and chemical test results which must include a sworn statement by a qualified mill representative to the effect that the subject material conforms to the requirements of the steel specified. If Contractor intends to incorporate previously used waling and bracing into the work he/she must

submit certification by a qualified Professional Engineer licensed in the State of New York that the material conforms to ASTM A36 and is in serviceable condition.

(C) Temporary Soldier Pile and Lagging Wall. Materials must comply with the following requirements:

1. STRUCTURAL STEEL: Conforming to the provisions of **Section 2.35**, Structural Steel, NYC Department of Transportation Standard Highway Specifications.
2. WOOD: The timber lagging must have a preservative treatment conforming to the American Wood-Preservers Association (AWPA) Standard C-2, Soil Contact. Actual cross section or stress grade Stress grading and acceptance must be in accordance with the requirements and provisions of **Section 2.39**, Stress Graded Timber and Lumber of the NYC Department of Transportation Standard Highway Specifications.
3. CONCRETE: Concrete must conform to the provisions of **Section 3.05**, Concrete, of the NYC Department of Transportation Standard Highway Specifications.
4. PILES: Soldier piles must be composed of steel or concrete materials only.

9.10TES.3. SUBMITTALS The Contractor will be required to submit Shop Drawings detailing all excavation support systems proposed for use in conducting the work.

- (A) The Contractor must submit to the Engineer for approval five (5) copies of TESS drawings, and related details that the Contractor proposes to use for the work and allow a minimum of two (2) weeks to review same. This time requirement is to be considered in forming a work schedule.
- (B) The Contractor must have these drawings prepared by a NYS Licensed Professional Engineer, currently registered in the State of New York, who must have a minimum of three (3) years of proven experience designing excavation support systems. Such drawings must be submitted together with design calculations, references, tables and charts. Both drawings and design calculations must bear the imprint of the Licensed Professional Engineer's seal and signature.
- (C) The TESS drawings must also include but not be limited to the following: the density of the soil, the internal angle of friction of the soil, the stress grade and type of lumber, the allowable steel stresses, whether or not the TESS will be removed or left in place, the method for backfilling and the sequence of construction operation where required.
- (D) Shop drawings must be on sheets twenty-seven (27) inches by forty (40) inches with a one-half (1/2) inch marginal space on three (3) sides and a two (2) inch marginal space for binding on the left side. Shop drawings must be numbered consecutively and must accurately and distinctly present the following:
 - (1) All working and erection dimensions.
 - (2) Arrangement and sectional views.
 - (3) Necessary details,
 - (4) Kinds of materials.

- (E) Each shop drawing must also be dated and contain:
 - (1) The name of this project and this contract number.
 - (2) The description name of contract item number or numbers under which it is or they are required.
 - (3) The locations or points at which the TESS is to be installed in the work.
- (F) Submissions must also reflect the means and methods chosen by the Contractor and approved by the Engineer to retain existing utilities in place.
- (G) The submission of multiple TES systems must be kept to a minimum. Whenever the Contractor submits multiple systems they must be accompanied with a Location Plan shop drawing to indicate the exact location where these various systems are to be installed. Since the approval of multiple systems will delay the sheeting approval process the Contractor is requested to submit a schedule indicating the time frame that these systems are required. In addition the Contractor will be required to install these multiple systems at the locations indicated on the submitted Location Plan. Should the Contractor request to change the TES system at any particular location, the Contractor will be required to resubmit the TESS shop drawing, for approval, even though the revised TES system may have been approved at another location within the project area.

9.10TES.4. DESIGN CRITERIA The following criteria must be used in designing the temporary excavation support system(s).

- (A) If directed by the Engineer the TESS will facilitate excavation to remediate substandard soil adjacent to existing buildings or structures. When the TESS will be installed within the influence line of an existing structure the system must be designed to minimize the potential of deflection including movement/settlement of the adjacent structure, i.e. providing supplemental raker or strut systems. The Contractor must have a monitoring system in place, as per Section **9.71 WBB** herein, to assure that the TESS design is adequate.
- (B) All compression members (struts) must be designed with a factor of safety of two (2.0). The factor of safety of two (2.0) must be a value above the allowable compressive stresses for steel as designated in the "Manual of Steel Construction" (AISC), and for wood as designated in the "National Design Specification for Stress-Grade Lumber and its Fastening".
- (C) The Contractor is advised that the maximum allowable bending stress (Fb) for all timber members must not exceed one thousand seven hundred fifty (1,750) pounds per square inch. If the Contractor elects to use a bending stress higher than $F_b = 1,750\text{-psi}$, written certification of bending stress test results must be submitted to the Engineer prior to use of such material in construction.
- (D) Limits of construction vibrations must be as mentioned in Section 9.71 WBB herein. As such the driving of piles will not be permitted. Soldier piles may be installed by pre-boring or other pre-excavating methods.
- (E) Where it is anticipated that heavier crane or equipment loads will fall within the influence line of the excavation, design loads must be increased accordingly.

- (F) Welding must be performed in accordance with AWS D1.1.
- (G) The Contractor must compute and include in the Contractor's submission of drawings and calculations the following:
 - (1) Maximum bending stress
 - (2) Maximum horizontal shear in wale
 - (3) Compression perpendicular to grain
 - (4) Maximum vertical shear stress
- (H) Decking
 - (1) Unless otherwise specified in the contract documents or approved in writing by the Engineer, the minimum live load on decking must be AASHTO HS20-44 or Contractor's equipment or heaviest truck loading (i.e., concrete trucks) whichever is greater plus an impact factor of thirty three (33) percent.
 - (2) Unless otherwise approved timber mats must extend a minimum of three (3) feet from sheeting line on either side of trench.
 - (3) Unless otherwise approved a minimum one thousand (1,000) pounds per square foot surcharge load must be used for sheeting below decking.
- (I) Maximum trench widths shown on sheeting details must not exceed those allowed by the standards or specifications.
- (J) Where the water table lies above the subgrade of excavation and a well point or deep well dewatering system is not used, the Contractor must include the effect of hydrostatic loading in calculations for both watertight and non-watertight sheeting.
- (K) Sheeting details must accurately depict actual field operations. The Contractor must be restricted to a maximum five (5) feet deep pilot cut and all details must reflect this. Additional braces and wales may be required to install sheeting due to the five (5) feet maximum pilot cut restriction. The Contractor must not assume that additional pilot cut depths will be allowed.

9.10TES.5. CONSTRUCTION DETAILS It must be the Contractor's responsibility to install a TESS in accordance with the City, State, and Federal Safety Codes.

- (A) The TESS locations shown on the plans are to be used as a guide in preparing the estimate quantities to bid upon and to establish the pay limits when the TESS is installed. To define the actual requirement, the Contractor must follow a suggested excavation sequence shown on the plans or the Contractor may define an alternative means approved by the Engineer.
- (B) Prior to any excavation, the Contractor must have excavation safety measures included in his/her submitted and approved Health and Safety Plan in compliance, including, but not limited to:
 - (1) Specific methods and procedures for protecting workers, residents, and the travelling public both during the excavation work and during non-working hours.
 - (2) Specific procedures for responding to observations of movements exceeding the maximums defined in the Contractor's approved Pre-Construction Report.
 - (3) Specific methods and procedures for responding immediately to unexpected failures of the excavation support system, including descriptions of the materials and equipment that will be on site for addressing any failures.

- (C) The following items must be complete prior to any TESS installation:
- (1) The Contractor must have submitted the Preconstruction Report and must have had it approved by the Engineer.
 - (2) The Contractor must have installed all components of his/her Monitoring Program and be actively monitoring vibrations and ground movements.
 - (3) The Contractor must have coordinated with property owners and building occupants as to the work to be performed and must have made all necessary accommodations to define and allow access to property as required.
 - (4) The Contractor must have submitted his/her TESS shop drawings and must have had them approved by the Engineer.
- (D) The Contractor must maintain, protect and support all City owned utilities within the influence lines of the excavation. The Contractor in accordance with the standards of the agencies having jurisdiction thereof must perform such maintenance, protection and support.
- (E) The Contractor must also be required to maintain, protect and support private utilities within the excavation lines on private property (not covered by JB4.0) in accordance with the standards of the agencies having jurisdiction.
- (F) Excavation support elements must be installed by the Contractor or Sub Contractor especially skilled in such work.
- (G) Install soldier piles by pre-boring or other pre-excavating methods to the tip elevation shown on reviewed working drawings. Prevent pre-bored or other pre-excavated holes from collapsing. Driving of piles will not be permitted.
- (H) Construct supports in a manner that will ensure that supported faces, and loads exerted thereon, will be stabilized; give particular attention to lateral supports. When conditions warrant, bracing against such structures may be permitted following the approval of drawings prepared and submitted by a Professional Engineer licensed in the State of New York, showing the assumed design loads and stresses, and details of such bracing.
- (I) The Contractor must maintain the excavation support systems in a safe condition. If unstable conditions, settlement, or movement is observed, the Contractor must respond immediately in accordance with the approved Health and Safety Plan. The Contractor must immediately remedy those conditions, settlements, and movements by methods such as adding bracing and supports and, as a last resort, backfilling. Remedies must be subject to acceptance by the Engineer and owner, except for emergencies.
- (J) Install lagging with no gap between the boards unless specifically directed. As installation progresses, backfill the voids between the excavation face and the lagging with sand or soil rammed into place. If gaps in the lagging are allowed, limit the gap width between lagging boards to 1/2 inch maximum.
- (K) Depth of exposed excavated face below the last placed lagging board must not exceed 15 inches.
- (L) Unless otherwise specified in the plans or these specifications, the Contractor has the option to either remove or leave the TESS in place. However, all walers, bracing and/or diagonal struts must be removed to allow for proper backfill compaction. If the TESS is left in place, the Contractor must then cut down the system approximately 4 feet below proposed finished grade.
- (M) The backfilling operation must be performed in lifts not to exceed 12" in order to permit proper placement and compaction of material against the elements to remain and /or the earth bank. This work must be accomplished in conjunction with the removal of wales,

braces and diagonal struts to allow for proper compaction. In no case must the lifts for backfilling exceed the specified or otherwise approved depth of compaction layer.

- (N) All damage to the adjacent pavement, structure, or ground caused by the use of the chosen TESS (e.g. Voids beneath the pavement or shoulder, pavement or shoulder cracking or subsidence, ground settlement, physical damage to structures) must be repaired to the satisfaction of the Engineer at no additional cost to the City. Severe damage which directly affects the safety of the public must be immediately repaired to the satisfaction of the Engineer. The operation must be halted until a satisfactory prevention method is instituted in accordance with the approved Health and Safety Plan.

9.10TES.6. METHOD OF MEASUREMENT The quantity of TEMPORARY EXCAVATION SUPPORT SYSTEM to be paid for must be the number of square feet obtained by multiplying the vertical length measured between the payment lines herein described, by the horizontal length of TES shown on the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications. The vertical length is that length measured between the upper and lower payment line. Unless otherwise specified on the plans, the upper payment line must be the ground surface existing at the site prior to the beginning of the work, or as ordered, in writing, by the Engineer. Unless otherwise indicated on the plans or in the proposal, the lower payment line must be the bottom of the excavation shown on the plans immediately adjacent to the protection system. The horizontal length must be the actual length of protection system installed measured along the payment lines as shown on the Contract Drawings. Both sides of the excavation must be measured and computed for payment.

9.10TES.7. BASIS OF PAYMENT The unit price bid per SQUARE FOOT for this work must include the cost of furnishing all labor, material, equipment, and insurance necessary to complete this work including, but not limited to, furnishing and installing steel, timber and concrete materials required for the TESS, providing design services, Shop Drawings, and removal of any or all of the TESS. Excavation to install the TESS and the Pre-Construction Report will be in accordance with and paid under Items 6.02 AAN Unclassified Excavation and Item 5.37 Construction Report of the NYC DOT Standard Highway Specifications respectively. Backfill will be in accordance with and paid under Item 203.21 Select Structural Fill of the NYS DOT Standard Specifications as shown on the Contract Drawings. The cost of maintaining the excavated area free from earth, water, ice, and snow will be deemed included in the unit price bid for the appropriate excavation item. Ninety (90%) percent of the unit price bid will be paid upon installation of the protective system and the remaining ten (10%) percent will be paid after its function is no longer required. The cost of any work necessary to cut off and remove the specified portion and temporarily support the roadway pavement must be deemed included in the unit price bid. The Contractor will be responsible for, and must solely at the Contractor's own expense, repair, replace and/or relocate all City owned utilities and/ or private utilities that are damaged and/or disturbed due to the Contractor's operation.

Payment will be made under:

Item No.	Item	Pay Unit
9.10 TES	TEMPORARY EXCAVATION SUPPORT SYSTEM	S.F.

SECTION 9.23 – Asphalt, Fuel, And Steel Price Adjustment Allowance

9.23.1. SCOPE AND INTENT.

(A) This section will provide for additional compensation to the Contractor for increases, or repayment by the Contractor for decreases, in the price of asphalt, fuel, or steel products.

(B) Price Adjustments will be made only for eligible work as defined below. With respect to asphalt and steel eligible work items, price adjustment will be paid, if eligible, only after the items have been permanently incorporated into the Work and accepted by the Commissioner. With respect to fuel, price adjustment will be paid, if eligible, only after fuel has been delivered to the Project site.

(C) No adjustment will be provided for any extra work paid by fixed price in accordance with the Standard Construction Contract Article 25.3.2 or paid for on a time and material basis per Standard Construction Contract Article 26. Additional quantities of existing Contract pay items at original bid prices will be considered eligible for asphalt, fuel, and steel price adjustments.

(D) Temporary work performed by the Contractor at its own expense will not be eligible for price adjustment. Notwithstanding the foregoing, temporary asphalt will be eligible if shown on the Contract Drawings or required to complete the Work and must be approved in advance by the Engineer.

(E) The Contractor, its Subcontractor(s) and/or Materialmen, must, when directed by the Commissioner, provide any and all Project documents and/or records the Commissioner deems pertinent to his/her determination with respect to the price adjustment. If requested by the Commissioner, the Contractor, its Subcontractor(s) and/or Materialmen, must provide copies of Project documents and/or records.

(F) Failure by the Contractor, its Subcontractor(s) and/or Materialmen, to comply strictly with the requirement to provide Project records will constitute a waiver of any claim for additional compensation the Contractor may have in connection with the price adjustment request.

(G) Project documents and/or records include, without limitation, Bid and Contract Documents, shop drawings, manufacturing and/or shipping data, as-built drawings, books of account, financial statements, invoices, vouchers, records, daily job diaries and reports.

(H) If the Contractor is paid additional compensation in accordance with this Section, the Contractor must pay a properly allocated share of such additional compensation to the applicable Subcontractor(s) and/or Materialmen.

9.23.2. PRICE ADJUSTMENT VALUES.

(A) The monthly average asphalt prices, monthly average fuel prices, steel cost basis and steel index values will be posted on the NYS Department of Transportation (NYSDOT) website: <https://www.dot.ny.gov/main/business-center/contractors/construction-division/fuel-asphalt-steel-price-adjustments>

(B) Historical index values are available as issued Engineering Bulletins on the NYSDOT website: <https://www.dot.ny.gov/eieb>

9.23.3. ASPHALT PRICE ADJUSTMENT.

(A) Price Changes.

The asphalt price adjustment will be based solely on the price changes for asphalt as determined

by the formulas below. No adjustment will be made if the monthly average posted price is within \$15.00 of the asphalt index price. No consideration will be given to the situation where the price paid by the Contractor, its Subcontractors, or the Contractor's or Subcontractor's supplier(s) exceeds the monthly average posted price.

8. (B) Applicability.

The asphalt price adjustment will apply to all permanent asphalt pavement items. The asphalt price adjustment will apply to temporary asphalt pavement if the temporary asphalt is shown on the Contract Drawings or approved in advance by the Commissioner. No price adjustment will be made for tack coat or pothole cold patch.

9. (C) Prices.

The asphalt index price and the monthly average posted price are defined as follows:

1. Asphalt Index Price. The asphalt index price is a price per ton of binder (also referred to as liquid bitumen or asphaltic cement) used solely as a basis from which to compute asphalt price adjustments. The asphalt index price will be the monthly average posted price for the month and year the bid opening for the Project.
2. Monthly Average Posted Price. The monthly asphalt index prices will be determined by NYSDOT using the methods set forth in NYSDOT Standard Specification Section 698.

10. (D) Quantity.

The quantity of asphalt in tons considered for adjustment will be determined by the tons of asphalt actually placed. This will be calculated using the measured volume of asphalt placed, and the asphalt's in-place density, as measured in the field. Quantities of asphalt will be measured to the nearest 0.1 ton.

11. (E) Adjustment.

Asphalt price adjustment will be based on the following formulas:

1. When price increases: $\text{Price Adjustment} = (\text{Quantity of Asphalt}) \times (\text{Monthly Average Posted Price} - \text{Asphalt Index Price} - \$15.00)$
2. When price decreases: $\text{Price Adjustment} = (\text{Quantity of Asphalt}) \times (\text{Monthly Average Posted Price} - \text{Asphalt Index Price} + \$15.00)$

12. (F) Payment of the Price Adjustment.

The Contractor is required to keep a log of all asphalt incorporated into the Project that is eligible for the price adjustment. The log must keep track of the date when the asphalt was purchased, the quantity of the asphalt, the Asphalt Index Price and the Monthly Average Posted Price, as determined in accordance with 9.23.3.C.

When the adjustment amount, calculated in accordance with 9.23.3.E, exceeds \$10,000.00 for all eligible asphalt incorporated into the Project, the Contractor must submit with its monthly payment requisition, the request for payment of the asphalt price adjustment.

9.23.4. FUEL PRICE ADJUSTMENT.

(A) Price Changes.

The fuel price adjustment will be based solely on the price changes for fuel as determined by the formulas below. No adjustment will be made if the monthly average posted price is within \$0.10 per gallon of the fuel index price. No consideration will be given to the situation where the price paid by the Contractor, its Subcontractors, or the Contractor's or Subcontractor's supplier(s) exceeds the monthly average posted price.

13. (B) Applicability.

The intent of the fuel price adjustment is to cover on-site equipment and vehicles only as delineated below.

1. The fuel price adjustment will apply for fuel used in:
 - a. Diesel equipment used on site, such as backhoes, excavators, cranes.
 - b. Stationary equipment used on site, such as trailer or skid mounted compressors, generators, or light towers.
 - c. Gasoline or diesel trucks and vans that are assigned to the site full-time, which may be used for off-site pickups and deliveries.
 - d. Equipment used for temporary heating.
2. The fuel price adjustment will not apply to:
 - a. On-site gasoline powered hand tools, such as chainsaws, cut-off saws, pressure washers, small generators, etc.
 - b. Vehicles (cars, pickup trucks) that are also used for commuting.
 - c. Delivery vehicles.
 - d. Any equipment at the Contractor's shop, manufacturer's shop, or other off-site facility.

14. (C) Prices.

The fuel index price and the monthly average posted price are defined as follows:

1. Fuel Index Price. A price per gallon of fuel used solely as a basis from which to compute fuel price adjustments. The fuel index price will be the monthly average posted price for the month of the bid letting.
2. Monthly Average Posted Price. The monthly fuel index prices will be determined by NYSDOT using the methods set forth in NYSDOT Standard Specification Section 698.

15. (D) Quantity.

The quantity of fuel in gallons considered for adjustment will be determined by invoices for fuel delivered to the Project site. Quantities of fuel will be measured to the nearest 0.01 gallon.

16. (E) Adjustment.

Fuel price adjustment will be based on the following formulas:

1. When price increases: $\text{Price Adjustment} = (\text{Quantity of Fuel}) \times (\text{Monthly Average Posted Price} - \text{Fuel Index Price} - \$0.10)$
2. When price decreases: $\text{Price Adjustment} = (\text{Quantity of Fuel}) \times (\text{Monthly Average Posted Price} - \text{Fuel Index Price} + \$0.10)$

17. (F) Payment of the Price Adjustment.

The Contractor is required to keep a log of all fuel incorporated into the Project that is eligible for the price adjustment. The log must keep track of the date when the fuel was purchased, the quantity of the fuel, the Fuel Index Price and the Monthly Average Posted Price, as determined in accordance with 9.23.4.C.

When the adjustment amount, calculated in accordance with 9.23.4.E, exceeds \$10,000.00 for all eligible fuel delivered to the Project site, the Contractor must submit with its monthly payment

requisition, the request for payment of the fuel price adjustment.

9.23.5. STEEL PRICE ADJUSTMENT.

(A) Applicability.

The intent of the steel price adjustment is to cover steel materials as follows. For the purposes of this section, steel includes all steel alloys, stainless steel alloys, iron, and ductile iron.

1. Steel price adjustment will apply to groups of similar material content.
2. The steel price adjustment will apply to the following Material Groups:
 - a. Structural steel
 - b. Reinforcing bars
 - c. Steel water mains, appurtenances, and valves
 - d. Ductile iron water and sewer pipes, appurtenances, fittings, and valves
 - e. Steel piles and minipile casings
 - f. Municipal steel and iron castings (manhole covers, sewer grates, etc.)
 - g. Tide gates, sluice gates, walkways, trash racks and appurtenances
 - h. Elevated platform structural steel
 - i. Steel railing
 - j. Fences
 - k. Guiderail steel backing and posts
3. The steel price adjustment will not apply to the following:
 - a. Steel in fabricated elements, such as traffic signal cabinets, or electrical fixtures and boxes
 - b. Handrails, access ladders, edging strips and other miscellaneous metals
 - c. Anchor bolts and fasteners
 - d. Steel facing for curb

(B) For each Material Group listed, the Contractor must also identify the parties whose relationship establishes the invoice date. If the parties are known, they must be identified by name. If the two parties are not known, they must be identified by role (Contractor, Subcontractor, Materialman, fabricator, etc.). Different parties may be identified for scopes within a Material Group for the purposes of establishing an invoice date. If the Contractor does not provide a list of materials to which to apply the steel price adjustment, no steel price adjustment will be made.

(C) If the percentage change for a given month does not exceed 5% plus or minus, from the benchmark steel index, no adjustments will be made for materials invoiced that month.

(D) The percentage change for each material group identified in Article 9.23.5.A.2 above will be determined using the month that the largest value of materials were invoiced.

(E) The weight of the steel must exclude minor appurtenances individually weighing less than 5 lbs (i.e., nuts, bolts, washers, etc.) and non-steel components, such as door insulation or glazing. Precast or prestressed concrete items must have total reinforcing steel weight listed on the approved shop drawings. The following sources must be used, in declining order of precedence, to determine the weight of steel: approved shop drawings; verified shipping documents; Contract Documents; industry standards (i.e., AISC Manual of Steel Construction,

AWWA Standards, etc.); and manufacturer's data.

1. Indexes and Prices. Adjustments are based on the Producer Price Index (PPI) for Semifinished Steel Mill Products (WPU 101702). PPI values are published by the US Department of Labor, Bureau of Labor Statistics (BLS). Recent PPI values are posted on the NYSDOT website linked above. The Cost Basis, Benchmark Steel Index, Monthly Steel Index, and the Percentage Change are defined as follows:
 - a. Cost Basis (CB). An average price of steel products in dollars per ton used solely as a cost basis from which to compute steel price adjustments. The cost basis for original Contract bid price items and additional work at the original Contract bid price will be the cost basis listed for the month of the bid letting. The cost basis for additional work at agreed price will be the value of the cost basis for the month the agreed price was submitted to the Commissioner.
 - b. Benchmark Steel Index (BI). The benchmark steel index for original Contract bid price items and additional work at the original Contract bid price will be the value of the preliminary PPI for the month of the bid letting. The benchmark steel index for additional work at agreed price will be the value of the preliminary PPI for the month the agreed price was submitted to the Commissioner.
 - c. Monthly Steel Index (MI). Value of the final PPI for the month the material is invoiced.
 - d. Percent Change. The percent change in any given month will be determined as follows:

$$\text{Percentage Change} = \left(\frac{MI - BI}{BI} \right) \times 100$$

18. (F) The quantity of steel for adjustment of each Material Group will be measured to the nearest 0.1 tons.
 1. Percent Change Greater Than +5%. If the Percentage Change is greater than +5% from the benchmark steel index, Price Adjustments will be made for materials invoiced that month. The Contractor must provide the Commissioner a detailed list of the weight of eligible materials within 60 calendar days after installation, including: the Contract pay item, the weight of steel, the month(s) of invoice, the source used to determine the weight, and if requested by the Engineer, copies of invoices to verify the month of invoice.
 2. Percent Change -5% to +5%. If the Percentage Change is between -5% and +5%, inclusive, from the benchmark steel index, no adjustments will be made for materials invoiced that month.
19. Percent Change Lower Than -5%. If the Percentage Change is lower than -5% from the benchmark steel index, a Price Adjustment will be charged to the Contractor for materials invoiced that month. The Contractor must provide the Commissioner a detailed list of the weight of eligible materials within 60 calendar days after installation, including: the Contract pay item, the weight of steel, the month(s) of invoice, the source used to determine the weight, and copies of invoices to verify the month of invoice.

(G) Adjustment.

Steel price adjustment will be made for all the materials which the Contractor opted to apply the steel price adjustment, based on the following formulas:

1. When price increases:

$$Price\ Adjustment = \left[\left(\frac{MI - BI}{BI} \right) - 0.05 \right] (CB) Qty$$

2. When price decreases:

$$Price\ Adjustment = - \left[\left(\frac{MI - BI}{BI} \right) + 0.05 \right] (CB) Qty$$

20. (H) Payment of the Price Adjustment.

Steel Price Adjustment will be paid once during the Project duration for each eligible Material Group after the final PPI is available to set the Monthly Steel Index for the invoice month determined in Article 9.23.5.D above.

9.23.6. MEASUREMENT AND PAYMENT.

The FIXED SUM shown in the Bid Schedule for Price Adjustments Allowance will be considered the price bid for this item. The fixed sum is not to be altered in any manner by the bidder. Should the amount shown be altered, the new figures will be disregarded and the original price will be used to determine the total amount bid for the Contract. The fixed sum payment made under this item will be equal to the sum of payments and credits for price adjustments, as approved by the Commissioner, with no markup for overhead, profit, or other fees allowed. The fixed sum amount is included in the bid solely to ensure that sufficient monies will be available to pay the Contractor for the price escalation adjustment payments as delineated herein, which may be more or less than the fixed sum amount.

Payment will be made under:

Item No.	Item	Pay Unit
9.23	PRICE ADJUSTMENTS	F.S.

SECTION 9.71 WBB - Vibration Monitoring of Existing Structures

9.71WBB.1. INTENT. The intent of this Section is to continuously monitor vibrations induced by construction activities for the existing bridge before demolition, existing bridge substructure during staged construction and new bridge structure including the existing subaquatic water main and the existing sewer structures within the “radius of influence” that the proposed bridge construction, elevated switchyard and other construction activity will impart on the surrounding soil until the work is complete and submit the readings with a summary report.

9.71WBB.2. DESCRIPTION. This work will consist of performing vibration monitoring of background and construction activities at the existing bridge before demolition, remaining portion of the existing bridge substructure during staged construction and new bridge structure including the existing subaquatic water main and the existing sewer, provide continuous email-notification of the readings to the Engineer (24-hours/7-days per week) and prepare daily and summary report(s) of vibration readings.

9.71WBB.3. MATERIALS. Provide a 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions. Annual factory calibration is required throughout the duration of the work.

9.71WBB.4. MONITORING CRITERIA.

ANOMALY	MOVEMENT	PEAK PARTICLE VELOCITY
PEAK CRITERIA	0.25 INCHES	0.5 INCHES PER SECOND

9.71WBB.5. METHODS.

The Contractor must provide, as a minimum, the following information:

A written vibration Monitoring Plan which must include, but not be limited to, the following items:

1. The name of the vibration monitoring specialist(s).
2. The scheduled start date and length of construction operations which require vibration monitoring.
3. The limits of vibration monitoring work for the proposed construction activities.
4. The location of any underground utilities in proximity to the construction operation.
5. Submit proof and details, as references, of two projects in the past five years where the vibration monitoring consultant performing the work has satisfactorily monitored construction operations by recording maximum peak particle velocities (PPVs). Include contact information for each reference.
6. Submit information on the required 3-component seismograph, capable of measuring particle velocity data in the three mutually perpendicular directions, including: the manufacturer’s name, model number, and documentation of factory calibration performed within the last 12 months.

7. The location of monitoring points along the Step Street and at the adjacent buildings to be monitored and maximum allowable PPVs as indicated in the contract documents. If not otherwise specified, a maximum allowable PPV in accordance with the United States Bureau of Mines (USBM) Vibration Criteria must be observed at locations along the existing wall.
8. The location of seismograph(s) placements must be as directed by the Contractor's Professional Engineer, registered in the State of New York, and must be of sufficient number to adequately monitor the construction-induced vibrations.
9. Appropriate details for anchoring the geophone(s).

The vibration monitoring system must inform the Engineer and the Contractor by email-notification immediately each time the measured particle velocities exceed 85% of the allowable peak particle velocity. The Contractor must make equipment or procedural modifications as required to avoid exceeding the allowable vibration intensity.

If the measured velocities exceed the maximum allowable PPVs, the Contractor must stop operations immediately and revise procedures to reduce vibrations to allowable levels.

If the seismographs show any indication of damage or vandalism, the seismographs must be immediately recalibrated or replaced.

The Contractor must be in communication with his/her monitoring firm's personnel during vibration monitoring at all locations to verify the data recorded.

The Contractor must provide the Engineer with the results of the continuous vibration monitoring, one work day after the readings are taken. Upon completion of the construction operations for those locations requiring monitoring, the daily submittals must be synthesized into a final report.

9.71WBB.6. MEASUREMENT.

The vibration monitoring work will be measured on a lump sum basis.

9.71WBB.7. PRICE TO COVER.

The contract price bid for vibration monitoring of existing structure will be a Lump Sum Price and must include the cost of furnishing all labor, materials, equipment, insurance, and incidentals necessary to continuously monitor vibrations and prepare and submit required reports with all other work incidental thereto all in accordance with the specifications and as directed by the Engineer.

Progress payments will be made for this item paid proportionally in accordance with the amount of work completed, measured on a monthly basis and upon receipt of the required reporting documentation.

Payment will be made under:

Item No.	Item	Pay Unit
9.71 WBB	VIBRATION MONITORING OF EXISTING STRUCTURES	L.S.

ITEM 555.80010001 – CRACK SEALING BY EPOXY INJECTION (PREVENTION)
ITEM 555.80020001 - CRACK REPAIR BY EPOXY INJECTION (RESTORATION)

DESCRIPTION: Install injection ports, seal the crack opening, inject the crack with epoxy (full depth for restoration work, or as deep as conditions allow for prevention work), and restore the sealed surface to a flush condition in areas visible to the public. Perform the work at locations indicated on the contract plans or where directed by the Engineer.

PREVENTION – use in contaminated, cracked concrete areas to prevent movement and protect reinforcing.

RESTORATION - use in uncontaminated cracked concrete areas to restore structural integrity. Take verification cores for payment. Have an experienced epoxy manufacturer representative present until the work is acceptable to the Engineer.

MATERIAL REQUIREMENTS:

1. Crack Sealant - epoxy paste that completely cures in 4 hours or less and retains the injected epoxy. Any other type of crack sealant is subject to a project demonstration and approval by the Engineer.
2. Low-Viscosity Injection Epoxy - Manufacturer certified to meet ASTM C881, Type I or IV, Grade 1, Class B or C (as temperature conditions require.)
3. Vertical & Overhead Patching Material (Approved List) – (for ITEM 555.80020001) §701-08

INJECTION EQUIPMENT: Use equipment in good working order, as approved by the Engineer, with the following features:

- Separate feed lines to the mixing chamber
- Automatic mixing and metering pump
- Ability to thoroughly mix the epoxy components in the mixing chamber
- Operator control of the epoxy flow from the mixing chamber
- Clean, legible, accurate pressure gauges easily viewable by the operator
- Ability to provide an uninterrupted pressure head to continually force epoxy into the cracks
- Injection pressure from 0 to at least 200 PSI
- Capable of metering each epoxy component to within 3.0% of the epoxy manufacturer's mix ratio

Un-reacted epoxy components may be stored overnight in separate reservoirs and feed lines.

Before starting the work, demonstrate to the Engineer the ability of the equipment to meter and mix epoxy components to the required mix ratio. Ratio accuracy may be determined by simultaneously metering each component into separate, clean, accurately graduated, volumetric containers, or another procedure approved by the Engineer. Also, activate the automatic mixing and metering pump, mix a small amount of injection epoxy, and waste it into a disposable container. The Engineer will observe this trial operation and be satisfied the equipment is working properly, and the epoxy is mixed with no streaks.

CONSTRUCTION DETAILS:

1. Crack and Surface Preparation. Remove all debris or contaminants accessible within the cracks by using hand tools, water blasting or oil-free high pressure air blasting, vacuuming, or other methods suitable to the Engineer. Epoxy resin will not penetrate: compacted, water or oil soaked debris. Allow free moisture within the crack to be absorbed before injecting epoxy. Remove all materials, including moisture, from the surface adjacent to the crack which might interfere with bonding of the crack sealant.
2. Injection Port Installation. Attach injection ports to the prepared surface by placing them onto (surface adapters) or into the cracks (socket ports) and affixing with crack sealant. Larger cracks may be ported by inserting an anchored tube into the crack.

Use positive connection port designs to connect injection equipment to the ports. Other injection port designs and attachment methods, where worker fatigue would not be a problem, require approval by the Engineer.

Use the following general guidelines for spacing injection ports when cracks are uniform in width through the structure. For cracks that get tighter with depth, double this spacing. Intermediate ports may be placed for observation. To permit maximum flow into the void, position ports on the wider crack sections and at intersections, rather than at an exact spacing.

If these guidelines cannot be followed, use port locations approved by the Engineer. Port spacing may be modified by the Engineer as experience is gained, or when cores are taken to determine penetration.

FOR CRACKS COMPLETELY THROUGH A MEMBER

- A. Cracks accessible from one side - space the ports not less than the thickness of the member.
- B. Cracks accessible from both sides - space the ports not less than twice the thickness of the member and stagger them relative to the ports on the opposite side. Make the stagger between ports (on opposite sides of the member) at least the thickness of the member.

Place the endmost ports at the ends of the crack so as to insure complete filling of the crack

FOR MULTIPLE CRACKS ALL OVER A MEMBER.

Space the ports as far apart as practical, but not less than 8" from one another. An 8" spacing presumes a 4" penetration in each direction, if the adjacent ports are not plugged when epoxy reaches them. For fine cracks that taper to an end, place the endmost ports about 4" from the end.

3. Crack Seal. After port installation, seal the crack opening with crack sealant, being careful not to plug the injection ports. Allow the crack sealant to cure completely before injecting epoxy.

Apply crack sealant only when surface and ambient temperatures are above 50° F.

4. Port Flushing. Prior to any epoxy injection, flush critical ports with oil-free compressed air to verify that air exits from all the installed ports, dry the cracks, and check for leaks.
5. Epoxy Injection. Perform epoxy injection only when the surface and ambient temperatures are above 45° F and are not expected to fall below 45° F during the next 24 hours.

UNIFORM WIDTH CRACKS - start toward the middle of a horizontal crack and work outward, or the lowest point of a sloping or vertical crack and work upward.

VARIABLE WIDTH CRACKS - start at the widest points of all types of cracks and work outward. Secure the feed line to the first port. Initiate and continue flow until epoxy exits from the adjacent port. (Plug observation ports and continue through the same port to achieve maximum penetration.) Temporarily stop the injection process, remove the feed line, and seal the port. Attach the feed line to the adjacent port and repeat this procedure along the crack until the last port is sealed.

Generally, use higher pressures when injecting narrow deep cracks, medium to low for wider cracks, and lowest pressures when injecting a delaminated area or an area susceptible to lifting. Low pressure applied for a longer duration is often more effective than high pressure applied for a shorter duration.

Allow the epoxy to fully cure prior to performing subsequent work in the repaired area.

In the event of leakage from a crack, stop the injection process until the leak is sealed. When any work stoppage exceeds 15 minutes, clean the mixing chamber and flush the line that carries mixed epoxy. Flush with a suitable solvent, followed by air.

6. For ITEM 555.80020001 CRACK REPAIR BY EPOXY INJECTION (RESTORATION), take cores ranging in diameter from 1 to 4", as approved by the Engineer, to verify full penetration by epoxy and its cure. Take a representative core from each structural element, or one from every 100 feet of crack repaired, whichever is greater, at locations approved by the Engineer. The Engineer will retain the cores and determine if they are acceptable for payment. Patch the holes with Vertical & Overhead Patching Material.

More than one core may be necessary to obtain an acceptable sample from cracks that diverge below the surface. (To avoid cutting reinforcing, the core drill may be angled to intercept a crack behind the reinforcing.)

7. Clean Up. In all areas visible to the public, as determined by the Engineer, remove spillage, the ports and crack sealant until flush with the adjacent surface. Remove stains and repair any damage to the satisfaction of the Engineer at no additional cost.

METHOD OF MEASUREMENT: The Engineer will measure the work as the number of linear feet of crack sealed or repaired, as specified.

BASIS OF PAYMENT: Include the cost of all labor, materials, and equipment necessary to complete the work in the unit price bid per linear foot. For ITEM 555.80020001 CRACK REPAIR BY EPOXY INJECTION (RESTORATION), also include the cost of coring and repairing the core holes.

For ITEM 555.80010001 CRACK SEALING BY EPOXY INJECTION (PREVENTION), the Engineer will authorize payment after the measured length of crack has been sealed and the surface cleaned.

For ITEM 555.80020001 CRACK REPAIR BY EPOXY INJECTION (RESTORATION), the Engineer will authorize payment after the measured length of crack has been repaired as verified by cores, the core holes patched and the surface cleaned.

Payment will be made under:

Item No.	Item	Pay Unit
555.80010001	CRACK SEALING BY EPOXY INJECTION (PREVENTION)	L.F.
555.80020001	CRACK REPAIR BY EPOXY INJECTION (RESTORATION)	L.F.

ITEM 595.98200018 - SPRAY-APPLIED, WATERPROOFING MEMBRANE

DESCRIPTION

The contractor shall furnish and install a spray-applied, waterproofing membrane in accordance with the contract documents, approved Material Detail Sheets (MDS), and as directed by the Engineer. All surface preparation and quality-control testing of substrates and the applied membrane are included.

MATERIALS

The spray-applied, waterproofing membrane shall meet the requirements of §717-02 and *ASTM C1305/ C1305M - 16 Crack Bridging Ability of Liquid-Applied Waterproofing Membrane*.

CONSTRUCTION DETAILS

General. The contractor shall arrange for the membrane manufacturer to have a competent technical representative with necessary equipment to perform the quality-control testing at the job site during all phases of preparation and installation. The technical representative shall present all quality-control testing equipment to the Engineer to verify calibration dates and demonstrate their competency to perform quality-control testing.

The contractor shall submit Safety Data Sheets (SDS) and approved MDS prepared by the membrane manufacturer to the Engineer a minimum of two weeks prior to the scheduled commencement of work. The contractor shall protect personnel exposed to primers and membranes in accordance with SDS and store all components of the membrane, including broadcast aggregates, at the job site in accordance with approved MDS.

The contractor shall use tarpaulin or other suitable masking to protect traffic, the surrounding environment and adjacent features from over spraying.

MEMBRANE APPLICATION AND QUALITY-CONTROL TESTING.

Substrate Preparation. All surfaces that are to receive the membrane shall be prepared in accordance with the approved (MDS). The contractor shall blast clean all surfaces as a minimum and remove residual matter using brooms and oil/moisture-free compressed air.

Substrate Moisture Content and Temperature. The contractor shall measure the surface moisture content ($\leq 5\%$ reading is required using a moisture meter) and temperature before applying the primer and membrane. The surface moisture content and temperature shall be within allowable tolerances as stated in the approved MDS. The contractor shall perform one test for every two thousand square feet of area as specified in the contract documents or a minimum of three tests.

Substrate Cohesion/Primer Adhesion. After the substrate has been prepared, the contractor shall test the cohesion of the substrate and the adhesion of the primer to the substrate in accordance with *ASTM D4541 – Pull-Off Strength of Coatings Using Portable Adhesion Testers*. The contractor shall conduct tests after the primer has sufficiently cured as determined by the technical representative. One test shall be performed for every two thousand square feet of prepared substrate area and at locations where deficient adhesion is suspected by the Engineer or a minimum of three tests. Required minimum adhesion strengths shall be 300 psi for each test on steel or 150 psi on Portland Cement Concrete substrates before applying primer to the remaining surface area.

Primer Application. The contractor shall apply primer to the substrate surface area at a rate specified in the approved MDS.

Membrane Application. The contractor shall apply each course of the membrane at a rate specified in the approved MDS. The membrane shall be applied in one or two coats to a minimum total thickness of 80 mils.

Membrane Thickness. The contractor shall measure the wet-film thickness of each course of membrane using a standard comb-type thickness gauge or measure the dry-film thickness of each course of membrane using a dry-film thickness gauge for nonferrous substrates.

One measurement for every one hundred square feet of membrane shall be done. The measured thickness of each course of the membrane and the entire thickness of the finished membrane shall be greater than or equal to 80 mils.

Membrane Pin Holes. Following the application and cure of the primer and membrane, the membrane shall be visually inspected for pinholes and integrity. Any defects shall be repaired as per the manufacturer recommendation.

Membrane Adhesion. The contractor shall test the adhesion of the membrane to the substrate in accordance with *ASTM D4541 – Pull-Off Strength of Coatings Using Portable Adhesion Testers*. One test shall be conducted for every two thousand square feet of membrane applied, and at locations where deficient adhesion is suspected by the Engineer or a minimum of three tests. The minimum adhesion strengths shall be 300 psi for each test on steel or 150 psi on Portland Cement Concrete substrates.

The contractor shall repair and correct any deficiencies in the membrane and substrate noted during quality-control testing as recommended by the manufacturer's representative at no additional cost to the State.

Binder Aggregate Application. When cold-applied, wearing-surface overlays are specified, or additional shear resistance between the membrane and the wearing surface is desirable, the contractor shall broadcast an aggregate binder onto the membrane in accordance with the approved MDS.

The aggregate binder shall be applied to the membrane before the membrane cures and as specified in the approved MDS. The aggregate and membrane shall be fully integrated after the aggregate has been applied and the membrane has cured. Loose aggregate shall be removed with brooms or oil/moisture-free compressed air before applying the tack coat.

Tack Coat Application. The contractor shall must apply a tack coat to the finished membrane as specified in the MDS prior to overlaying the membrane with a wearing surface.

METHOD OF MEASUREMENT

This work will be measured as the number of square feet of spray-applied, waterproofing membrane satisfactorily furnished and installed as shown on the contract plans or ordered by the Engineer.

BASIS OF PAYMENT

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
595.98200018	SPRAY APPLIED, WATERPROOF MEMBRANE	S.F.

ITEM 607.91300004 - WELDED WIRE FABRIC FENCE**DESCRIPTION:**

The work will consist of furnishing and installing a welded wire fabric fence in accordance with this specification, the contract documents and as directed by the Engineer.

A welded wire fabric fence is a panelized, prefabricated fencing system.

The concrete work included in this pay item is for concrete foundation only (incidental to the construction of the welded wire fabric fence). Other welded wire fabric fence foundations, such as abutments and walls, shall be detailed and paid for under separate pay items.

MATERIALS:

The following sections of the standard specifications shall apply:

Structural Concrete	§555-2
Concrete Grouting Material	§701-05
Galvanized Coating and Repair Methods	§719-01

The material shall meet the following requirements:

1. Where grout is specified for the anchor bolts, the material shall meet the requirements of §701-05, Concrete Grouting Material.
2. When specified, the following standards shall be met for the materials required in the contract documents:

Angles and plates:	ASTM A36
Posts and Rails:	ASTM A500 Grade A
End Caps for posts and rails:	ASTM A36
Lock-Crimp wire mesh:	ASTM A510
Step and Carriage bolts, washers, and nuts:	ASTM A307 Grade 2, Zinc coated
Anchor bolts:	ASTM A307 or A449

- Unless otherwise specified herein or in the contract documents, all components of the welded wire fabric fence, including hardware and uncoated steel shall be galvanized according to §719-01, Galvanized Coating and Repair Methods, Type 1. Hot-dipped galvanized components to be powder coated shall:
 - not receive a water quench or chromate quench.
 - All drainage spikes and surface defects shall be removed.
 - Galvanized components shall not be left outside or allowed to get wet.
3. Galvanized components shall not be transported uncovered

4. All exposed and visible components of the welded wire fabric fence, including hardware, shall receive an electro-statically applied exterior powder finish, either polyurethane or triglycidyl isocyanurate (TGIC), as defined by Powder Coating Institute.
 - a. TGIC (polyester powder) shall be applied at a minimum thickness of 0.003"
 - b. Polyurethane shall be applied a minimum thickness of 0.002"

Acceptable coatings for field applied repair to the powder coating shall be as recommended by the coating powder manufacturer. The recommended repair coating shall be deemed to have comparable service life, color and UV resistance as the powder coating.

5. The fabrication of all welded wire fabric fence components shall be performed in a skilled manner and produce a uniform product.
6. The fence shall be fabricated to the dimensions and alignment as shown in the contract documents.
7. All exposed flame cut surfaces shall have a surface roughness not to exceed 250 as defined by the ANSI Standard Specification B46.1. Grind all edges of post plates, post base plates and connection plates so that sharp edges are removed. Sheared edges on angles and plates shall also be ground to remove any sharp edges. Structural tubing shapes shall be sawcut. All grinding and smoothing shall be done prior to galvanizing and powder coating.
8. Welding shall be performed only where specifically noted in the contract documents. All welding shall meet the requirements of the New York State Steel Construction Manual (NYSSCM). All welding is intended to be part of the shop fabrication. Field welding shall only be performed with the written authorization of the Engineer and in the most limited circumstances.
9. Any required shaping, welding or grinding to a smooth surface shall be performed prior to the required surface coating being applied.
10. Lock-crimp wire mesh shall be stretched taut and welded to the fence panel frames as detailed in the contract documents.
11. Where hand rails and/or rub rails are called for in the contract documents they shall span the minimum of three (3) fence posts.

Submittals:

The Contractor shall submit, for approval, the following manufacturer information:

- Material specifications,
- Catalog cuts and parts lists,
- Material assemblies, if required, for the products to be installed, and
- Manufacturer's details and method of fabrication (shop) for all material shown in the contract documents. This include the welding, hardware, fence sections, finish coating of all surfaces

CONSTRUCTION DETAILS:

Submittals:

The Contractor shall submit for approval, complete shop drawings which detail the following:

- Any proprietary installation requirements, including those governing the safe handling, lifting or storing of fence sections, components and/or materials,
- Material assemblies' installation instructions, if required, and
- Manufacturer's details and method of assembly for all material shown in the contract documents. This include the welding, hardware, fence sections, finish coating of all surfaces and the manufacturer's guidance for acceptable methods of field repairs to any minor defects or damage to the finish surface coating. Any necessary repairs to the finish surface coating shall be made prior to acceptance of the finished product, and shall be included in the cost bid for this work.

Powder Coating:

The galvanized surfaces that are to be powder coated shall be prepared in strict accordance to ASTM D7803-12 Standard Practice for Preparation of Zinc (Hot Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Powder Coating. The galvanized coating shall be categorized by age, verified by the galvanizer's certifications, and such surfaces shall be categorized as either new, partially weathered, or fully weathered according to the definitions provided within ASTM D7803-12, and shall be prepared accordingly. No aspect of surface preparation within D7803-12 shall be omitted, and all powder coated articles shall be accompanied with a certification stating that it was prepared to ASTM D7803-12.

The powder coating shall be applied in strict accordance with the recommendations of the coating powder manufacturer and shall meet the thickness requirements established by this specification, unless the recommendations of the coating powder manufacturer are different for its use over hot dip galvanizing. In such case, the Contractor shall present such documentation to the Engineer two weeks prior to the commencement of surface preparation/powder coating work for a decision in this regard. The Contractor is expected to provide and maintain, at the Engineer's request, a written description of the surface preparation and powder application procedures followed by the coating applicator to meet the requirements of this Specification.

The powder coating shall be free of coating defects, including pinholes and holidays.

1. Immediately prior to erection of the welded wire fabric system, to include the posts and base plates, all components shall be inspected for damage or defects of any kind. Defects, broken components, and bends or kinks not specifically called for in the contract documents shall constitute sufficient cause for rejection of those damaged components. Any and all rejected components (materials) shall be replaced by the Contractor at no additional cost to the state.
2. The welded wire fabric fence shall be assembled and erected according to the manufacturer's (fabricator's) instructions and to the dimensions and alignment shown in the contract documents.
3. Care shall be taken in the placement of the anchors for the fence post to allow for the proper placement and alignment of the fence post to receive the prefabricated fence sections.
4. Unless otherwise specified in the contract documents, the base plates shall be placed level (in all directions) and the fence posts shall be placed plumb (in a vertical alignment).
5. After the anchor stud bolts have been tightened, in the manner prescribed by the shop drawings and contract documents, the studs shall be saw-cut $\frac{1}{2}$ " above the nut. The first thread above the nut shall then be damaged. The cut end of the anchor bolt shall be coated in conformance with the requirements of the New York State Standard Specification (latest update as of the date of letting) Sub Section 719-01, Galvanized Coatings and Repair Methods, Type 1.
6. Bending or curving of any fence components in the field shall not be permitted. Any bending or shaping or curving of the fence material, as required to conform to the contract documents, shall be performed in the shop. Heat curving shall not be allowed to facilitate bending.
7. Any damage to the powder surface coat finish during erection shall be repaired prior to final acceptance of the work. These repairs shall be made at the Contractor's expense and included in the price bid for the work.

METHOD OF MEASUREMENT:

The work will be measured as the number of square feet, measured to the nearest square foot, of Welded Wire Fabric Fence satisfactorily installed.

BASIS OF PAYMENT:

The unit price bid per square foot of welded wire fabric fence shall include the cost of all labor, material and equipment necessary to satisfactorily complete the work. For payment calculations, the product of the length times the height of the welded wire fabric shall constitute the area of the prefabricated fence sections. No payment shall be made for powder coated fencing that is not accompanied by a certification that its galvanized surfaces were prepared to ASTM D7803-12.

Payment will be made under:

Item No.	Item	Pay Unit
607.91300004	WELDED WIRE FABRIC FENCE	S.F.

ITEM 607.93000011 – WATERFOWL FENCE

DESCRIPTION

This work consists of installing and maintaining a temporary fence that will discourage waterfowl from entering and grazing on newly planted wetland plants.

MATERIALS

Posts shall be 2in x 2in untreated hardwood or cedar and shall meet the requirements of New York State Department of Transportation Standard Specifications Section 712-13, "Timber and Lumber."

String shall be polypropylene binder twine or an opaque nylon mason's line with minimum test strength of 100lbf that is flexible enough to wrap tightly around posts.

Surveyors' Ribbon shall be brightly colored.

Nails shall be hot-dipped galvanized roofing type.

Plastic Mesh Fence Fabric shall be between 2 ft and 4 ft tall, have openings no larger than 4 square inches, be resilient enough to resist cracking, and be thick enough to resist tearing, as determined by the Engineer.

CONSTRUCTION DETAILS. Grading of the wetland planting area shall be complete before starting installation of the waterfowl fence. The perimeter waterfowl fence shall be at least 1.5 feet outward from the plants at the perimeter of each wetland planting area. Interior waterfowl fences shall be installed to form a 10 ft by 20 ft grid covering the entire wetland planting area unless specified otherwise in the contract documents.

Posts shall be pounded a minimum of 3 feet into mud or a minimum of 1 foot into solid substrate. Installed posts shall support themselves in a vertical position throughout the growing season. Posts shall extend a minimum of 4 feet above mean high water level and be spaced no farther apart than 10 feet on center unless specified otherwise in the contract documents.

String shall be stretched taught between and wrapped or tied around each post. Nails shall be partially driven into the posts to keep strings at the correct elevation. Vertical spacing between strings shall be no more than 6 inches, and they shall be placed from the mean low water level to 4 feet above the mean high water level unless specified otherwise in the contract documents.

Surveyors' ribbon shall be tied around each string at 3 foot intervals. Ribbon shall be wrapped twice around the string before knotting to prevent slippage.

Plastic mesh fence fabric shall be fastened to the perimeter posts to prevent waterfowl from walking into the wetland planting area. The bottom edge of the fabric shall be in contact with the ground over its entire length.

All leftover plastic mesh fence fabric, string, posts, nails, and other debris shall be completely removed from the site when installation of the waterfowl fence is complete.

Maintenance. Throughout the Period of Establishment for the wetland planting, the Contractor shall visit the site at least once a month during the growing season to inspect and repair any damage to the waterfowl fence. In addition, if the Contractor is notified of damage by the Engineer or the Regional Landscape Architect, he/she shall repair the damage within one week of notification. At the end of the Period of Establishment for the wetland planting, the Contractor shall remove the fence and all miscellaneous debris from the site.

METHOD OF MEASUREMENT. Waterfowl fence will be measured in linear feet along the strings or plastic fencing connecting the posts.

BASIS OF PAYMENT. The unit price bid shall include the cost of all labor, materials, equipment, and incidentals necessary to complete the work in accordance with the contract documents and to the satisfaction of the Engineer. If maintenance is not performed in a timely manner, the Engineer may withhold an appropriate portion of the second progress payment.

PROGRESS PAYMENT SCHEDULE

Work Completed	Progress Payment
Waterfowl fence installed	50%
Maintenance of the fence throughout the Period of Establishment for the wetland planting and removal of the fence at the conclusion of the Period of Establishment for the wetland planting	50%

Payment will be made under:

Item No.	Item	Pay Unit
607.93000011	WATERFOWL FENCE	L.F.

ITEM 609.26520011 - STEEL FACING FOR CURB ON STRUCTURE (NYC), TYPE D

DESCRIPTION:

Under this item, the contractor shall supply and install steel facing for curb on structure at the locations indicated on the plans.

MATERIALS

- A. Structural Steel shall conform to the requirements of ASTM Designation A283M, Grade A, and shall meet the requirements of the New York State Steel Construction Manual.
- B. Epoxy primer, Epoxy Intermediate Coat and Polyurethane Topcoat shall meet the requirements of Item 572.01 Structural Steel Paint systems: Shop Applied, except shop inspection for painting is not required. The Polyurethane topcoat shall be light gray in color such that a prepared chip will be a reasonable visual match to Munsell Book Notation 10B 6/1. Viewing shall be done under North Standard Daylight.
- C. Concrete grouting material shall meet the requirements of subsection 701-05.

CONSTRUCTION DETAILS

Fabrication details shall comply with the details and note on the New York City Department of Highways Standard Drawing H-1043 "Steel Faced Curb For Structures" and with the following:

- A. Fabrication of the steel facing shall conform to the requirements of the New York State Steel Construction Manual. All surfaces of completed steel facing, including anchors, fastenings, etc., shall be thoroughly cleaned of all rust, oil, grease, scale, or foreign matter in accordance with the requirements of SSPC-SP6 prior to painting.
- B. All surfaces of steel facing, which remain exposed after installation shall be painted with three coats of paint as described in Paragraph B, Materials, above. Finish coat color shall be light gray, conforming to Munsell Book Notation 10B 6/1. Viewing shall be done under North Standard Daylight.
- C. Concrete Grouting Material, if required shall be placed adjacent to the steel facing in locations shown on the Plans.

METHOD OF MEASUREMENT

The quantity to be paid will be the number of feet of steel facing actually installed.

BASIS OF PAYMENT

The unit price bid per foot shall include the cost of all the materials and labor necessary to install the steel facing and concrete grouting material. The cost of furnishing and placing concrete and forming of the recess, if required, are included in the appropriate concrete items.

Payment will be made under:

Item No.	Item	Pay Unit
609.26520011	STEEL FACING FOR CURB ON STRUCTURE (NYC), TYPE D	L.F.

ITEM 634.18370029 – INCIDENTAL REPAIRS

DESCRIPTION

This work will consist of the incidental repair of safety and structural conditions of the existing bridge and roadways as revealed during construction operations and as ordered by the Engineer during the life of the Contract. Incidental repairs must include, but not be limited to, stringers, floorbeams, girders, columns, concrete roadway slabs, concrete sidewalk slabs, railings and structural components of abutment, pier and wingwall. Included is incidental painting at the electrical connections to the existing steel.

MATERIALS AND METHOD OF CONSTRUCTION

All materials and construction method must comply with the appropriate requirements of NYSDOT Standard Specifications, Construction and Materials, with current additions and modifications.

BASIS OF PAYMENT

The Contract price for this item must be the fixed price lump sum (FPLS) amount as shown in the Bid Schedule. The Bidder must not alter the FPLS bid amount. The FPLS must constitute an allowance against which the Contractor must be paid in accordance with the following:

- All work under this item will be performed on a Time and Material basis. Price to be paid for Incidental Repair Work must be the actual and reasonable cost, calculated in accordance with Articles 26.2.1 through 26.2.13 (excluding Article 26.2.10) and Article 26.3 of the City of New York Standard Construction Contract. The words “Extra Work” in the above referenced Articles must be substituted with “Incidental Repair Work” as outlined in this pay item.
- Payment for amount exceeding the FPLS under this item must be made in accordance with the terms of Articles 26.2.1 through 26.2.13 and Article 26.3 of the City of New York Standard Construction Contract.

Payment will be made under:

Item No.	Item	Pay Unit
634.18370029	Incidental Repairs	F.S.

SECTION HW-900H - Allowance for City Work Acceleration

Under this Section, the Contractor will be paid for City work deemed necessary by DDC's Commissioner to accelerate the City work items in the project during critical periods but the use of this item will expire on the original contract substantial completion date. Such accelerated City work includes:

- A. 100% of the premium portions of overtime pay for working during non-scheduled work hours which shall be defined as those hours of work outside the permissible hours stated in the original contract OCMC Traffic Stipulations; or,
- B. The premium portion of overtime pay for overtime actually worked beyond the 40-hour work week but within the permissible hours of work stated in the original contract OCMC Traffic Stipulations; or,
- C. All other incidental expenditures caused by modifications of project site regulations or administrative requirements ordered by the Commissioner that result in additional costs to perform contract work as specified.

Such accelerated City work shall be paid for under this item in accordance with the requirements of **Articles 25 and 26** of the Standard Construction Contract.

Payment made under this Fixed Sum item shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the City work as ordered by DDC's Commissioner.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to ensure a method of payment for any accelerated work performed by the Contractor, as directed by DDC's Commissioner.

Payment will be made under:

Item No.	Item	Pay Unit
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	F.S.

SECTION HW-907 - Allowance for Incidental Asbestos Abatement

HW-907.1. GENERAL

The Contractor will be required to engage services of an Asbestos Abatement Subcontractor for removal of asbestos containing materials as needed when discovered during the course of work as per plan, specifications and directed by the Engineer.

HW-907.2. WORK INCLUDED

The scope of works as applicable for this project will be done in accordance with SECTION 028013, SECTION 220013, SECTION 230013, SECTION 260013 and SECTION 028213 and APPENDIX A of the ASB-PAGES herein VOLUME 3 OF 3.

HW-907.3. POST-BID SUBMITTALS

The successful low bidder shall be required to submit the following within 30 days of award:

Evidence of meeting the qualifications described in ASB-PAGES herein VOLUME 3 OF 3.

This information shall, in sufficient detail, demonstrate that the Contractor or Subcontractor who will be performing this work fully understands the equipment requirements and nature of the work to be performed under this contract. All submissions made by the Contractor will be subject to review and approval by the Engineer.

HW-907.4. MEASUREMENT AND PAYMENTS:

The quantities to be measured for payment will be in accordance with the ASB-PAGES herein VOLUME 3 OF 3.

HW-907.5. METHOD OF PAYMENT

Payment will be made under:

Item No.	Item	Pay Unit
HW-907	ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT	F.S

SECTION HW-908 - Allowance for Extra Work Due to Archaeological Discoveries

HW-908.1 DESCRIPTION. In accordance with the Special Provisions article titled "ARCHAEOLOGICAL DISCOVERIES", should extra work be ordered by the Resident Engineer as a result of any archaeological discoveries being found under this project, it must be paid for under this item as extra work in accordance with the requirements of Article 26 in the Standard Construction Contract dated March 2017.

HW-908.2 MEASUREMENT. Payment made under this Fixed Sum item must cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to complete any extra work ordered by the Engineer due to archaeological discoveries found at the site.

HW-908.3 PRICE TO COVER. No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any extra work performed by the Contractor, as directed by the Engineer in consultation with the City's Archaeologist due to archaeological discoveries found at the site.

Payment will be made under:

Item No.	Item	Pay Unit
HW-908	ALLOWANCE FOR EXTRA WORK DUE TO ARCHAEOLOGICAL DISCOVERIES	F.S.

SECTION PK-643 – Maintenance, Protection and Installation of NYCDPR Facilities

PK-643.1 DESCRIPTION.

This work for New York City Department of Parks and Recreation (NYCDPR) must consist of furnishing, fabricating and installing temporary supports, enclosure/support system, new split and solid telephone conduits, sleeves, fittings and appurtenances for maintaining and protecting all telephone cables to be maintained in service during all phases of rehabilitation as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications. Support and protection must be provided for all active cables, and will remain active, during the entire period of construction and the Contractor must conduct his/her work operations to ensure that they remain in service.

The work must include the installation, removal and disposal of temporary supports as shown on the contract plans and specified herein and/or an alternate temporary support method as may be proposed by the Contractor and approved by the Engineer in consultation with NYCDPR; all necessary excavations and backfilling of trenches off bridge ends including temporary protective structures; temporary fencing about temporary structures and open trenches; manual removal of existing cable encasement; installation of any required cable trough supported on temporary structure; manually moving existing cables after encasement is removed onto temporary supports prior to the demolition of the existing bridge structure and during the erection of new structures, installation of temporary spare conduits between manholes for emergency use and installation of new permanent conduits. This work must also include the placement of the cables into split PVC ducts into final position on the completed bridge, as well as the placement of new solid PVC ducts, as shown on the Contract Drawings. Cable trough assembly, if required, must enclose the existing cables and spare conduits in a protective sheath providing a continuous support for the telephone cables, air pipes and fire line.

The Contractor must coordinate his/her efforts with that of the Engineer in consultation with NYCDPR with respect to all work impacting the facilities in question. Removal and restoration of concrete sidewalk and/or roadway pavements, to include subbase, is covered and paid for under appropriate unit price Items including, but not limited to, 580.01 Removal of Structural Concrete from the NYS DOT Standard Specifications, and 6.02 AAN Unclassified Excavation and 4.02 AG Asphaltic Concrete Wearing Course, 3" Thick from NYC DOT Standard Highway Specifications and must not be considered part of this item in which all work must be considered to be performed in "unpaved areas.

The Contractor must be responsible to maintain and protect at no additional cost to the city all newly placed and existing cables and manholes exposed by the Contractor against any unauthorized access, vandals or trespassers until the roadway is restored. Interferences with public/private utilities must be resolved with the restoration of all NYCDPR facilities to "as-new" condition at no additional cost to NYCDPR.

The Contractor, must during his/her inspection of the site, assess and include under this item any costs associated with working near or under utilities aerial cable(s) and pole(s) including but not limited to any change(s) of operation, equipment, manning and/or reductions in productivity. The Contractor must in his/her bid not anticipate the removal or the relocation of aerial cable(s) or their associated poles.

The Contractor must coordinate with the Engineer in consultation with NYCDPR to schedule regular inspections of the cables and splice cases by the Engineer during the entire support phase of the project until the cables and splice cases are returned to their permanent positions and accepted by the Engineer in consultation with NYCDPR.

Twenty-four (24) hours, seven (7) days per week, site access must be required to allow emergency crews to handle cable failures or work related to this contract requiring utility crews or their appointed Subcontractors. Access to the site will be required for the entire duration of the project.

PK-643.2 MATERIALS.

The preceding items must be obtained after Working Drawings and Shop Drawings have been submitted by the Contractor and approved by the Engineer. Approved suppliers of the materials are specified and shown herein or as shown on the plans.

The Contractor must use the proposed utility supports to support the duct system. The utility supports (angles) and connection plates are to be paid for under this item.

All materials necessary to complete the work must be furnished by the Contractor, unless specifically noted otherwise. Materials to be provided by the Contractor must include but not be limited to the following:

A. Conduit

1. Fiberglass Plates, Square and Circular Tubing
2. Fiberglass Heavy-Wall Conduits and Fittings, ASTM D2105
3. Solid 4" and 2" PVC Conduit and Fittings, Type C or Schedule 40, ASTM D1784
4. Split 4" and 2" (ID) PVC conduits, Type C or Schedule 40
5. Joint Adhesives
6. Adapters Fiberglass (IPS) to PVC
7. 2" to 4" PVC Adapters
8. Multiple Tile Duct (MTD) Adapters must be four or six-way square to round tile adapters (plastic)
9. Conduit Watertight Expansion Plugs
10. Fiberglass Socket Expansion Joints and Stop Rings
11. Conduit spacers
12. Pulling Eyes
13. Terminators
14. Pulling Rope, 3/8-inch diameter polypropylene
15. Manhole Inserts
16. Expansion Anchors

Potential Suppliers:

- Champion Fiberglass, 6400 Spring Stuebner Road, Spring, Texas 77389. (281) 655-8900
- Prime Conduit, Inc. 23240 Chagrin Boulevard, Suite 405, Cleveland, OH 44122. (216) 464-3400
- Structural Fiberglass, Inc. PO Box 615, 4766 Business Route 220 North, Bedford, PA 15522. (814) 623-0458

B. Manhole Appurtenances

1. Precast Collars. 36" diameter
2. Ladder Brackets, S-56
3. Sump frames and Covers

Potential Suppliers:

- Utility Concrete Products, LLC, 2495 W. Bungalow Road, Morris IL 60450. (815) 416-1000
- A.C. Miller, Inc. 31 E. Bridge Street, Spring City, PA 19475. (908) 403-2368
- Oldcastle Infrastructure, 114 Rocky Point Road, Middle Island, NY 11953. (631) 924-7400

C. Fiberglass Structural Shapes and Structural Anchors

1. Fiberglass structural shapes, plates and studs, and fiber bolts/nuts/washers.

Potential Suppliers:

- Enduro Composites, 16602 Central Green Blvd., Houston, Texas, 77032. (800) 231-7271
- Structural Fiberglass, Inc. PO Box 615, 4766 Business Route 220 North, Bedford, PA 15522. (814) 623-0458
- Champion Fiberglass, 6400 Spring Stuebner Road, Spring, Texas 77389. (281) 655-8900

2. Concrete Anchors

Potential Suppliers:

- Confast, 1231 E. 26th Street, Cleveland, OH 44114. (216) 357-7431
- Hilti Inc., 40-15 Northern Blvd, Long Island City, NY 11101. (800) 879-8000
- Simpson Strong-Tie, 2600 International Street, Columbus, OH 43228. (614) 876-0636

The following must meet the requirements of the noted Subsection of the NYS Department of Transportation Standard Specifications:

Portland Cement	701-01
Masonry Cement	701-02
Grout	701-05
Crushed stone, 1 1/2"	703-02
Mortar Sand	703-03
Concrete Sand	703-07
Common Brick	704-01
Reinforcing Bars	709-01
Wire Fabric for Concrete Structures	719-02
Admixtures	711-08

Structural Steel, A36	715-01
High Strength Bolts, nuts, washers, and threaded rods, A325	715-14
Steel Pipe, ASTM A53	

The structural steel must meet the requirements of the NYS Steel Construction Manual. All structural steel members, sleeves, bolts, nuts, washers, and threaded rods must be galvanized in accordance with Subsection 719-01 of the NYSDOT Standard Specification. Structural steel members must be painted in accordance with the painting requirements for the bridge structural steel. All temporary structures must receive one shop prime coat in conformance with the permanent structural steel painting requirements.

Lead Wool. As approved by the Engineer.

Lumber. Must meet the requirements of ASTM E84

Miscellaneous. Traffic Plates, Traffic Control Devices and Temporary Pavement as required.

Concrete. Must meet the requirements of Subsection 501 of the NYSDOT Standard Specifications as follows;

Reinforced concrete for manholes – must have a minimum $f'c = 4500$ psi at twenty-eight (28) days. Concrete used for encasement of conduits, bends, etc. must have a minimum $f'c = 1500$ psi at twenty-eight (28) days.

The preceding items must be obtained after Working Drawings and Shop Drawings have been submitted by the Contractor and approved by the Engineer. Approved suppliers of the materials are specified and shown herein or as shown on the plans

PK-643.3 CONSTRUCTION DETAILS.

A. **General.** Ten (10) days prior to the start of work, the Contractor must supply the Engineer with the manufacturers' written instructions for application and use of adhesives, waterproofing and any other material required by this specification.

B. **Notifications:** The Contractor must notify:

1. NYCDPR, Olmstead Center, Flushing Meadow-Corona Park, Flushing, New York 11368,
 - a. Administrator of Flushing Meadows Corona Park, (718) 760-6865,
 - b. Chief of Architecture & Engineering, (718) 760-6688,
2. NYCDPR, Director of ITT Operations, Citywide Services Complex, 20 Bronx Shore Road, 2nd Floor, New York NY 10035, (212) 410-8991,

at least fourteen (14) days in advance of planned work in order that Engineer in consultation with NYCDPR can inspect all conduits and cables during the work. The cables will be in operation at all times. The need for any NYCDPR personnel must be identified to NYCDPR or NYCDDC field representative seven (7) days prior to their need.

- C. **Verifications:** All existing conditions and dimensions must be field verified by the Contractor prior to submitting Working Drawings and Shop Drawings.
- D. **Entering Existing Manholes:** Methods and procedures for working in existing NYCDPR manholes must be reviewed with and approved by the Engineer in consultation with NYCDPR prior to entering any NYCDPR manhole.

All work operations inside existing manholes must include provisions for the protection of existing cables and splice cases to the satisfaction of the Engineer in consultation with NYCDPR.

The Engineer in consultation with NYCDPR must be contacted seventy-two hours prior to entering any existing NYCDPR manholes. Entry into an existing NYCDPR manhole will require the Engineer, in consultation with NYCDPR, to inspect the existing cables/splice cases. Costs to repair any damage caused by the Contractor will be billed directly to the Contractor.

All existing manholes entered by the Contractor, or his/her representative, will be ventilated with a power blower that is approved by the Engineer in consultation with NYCDPR.

All manholes must be left clean and free of all debris.

- E. **Working Drawings.** The Contractor must submit calculations and working drawings prepared, stamped and signed by a New York State Licensed Professional Engineer, for the proposed temporary support system which may include, but not limited to: cable trough, temporary pile bents, support beams and their bearing and anchorage systems and jacking operations required for the horizontal and vertical alignment of the cables and the cable trough. The support system drawings must include, but need not be limited to, the following:
- Lift point locations.
 - Calculated lifting forces.
 - Details for all lifting equipment and support systems.
 - Type and grade of all materials.
 - Distance that each point is to be raised.
 - Schematic hydraulic layout.
 - All disconnections, reconnections or adjustments that are necessary to properly complete the lifting operations. This includes, but is not limited to, railings, joints, power lines, gas lines, water lines, etc.
1. Six (6) legible, standard sized (22 inches x 36 inches nominal, 21 inches x 33 1/2 inches working area) prints of each drawing, together with three (3) copies of all design computations must be submitted to the Engineer for approval. Two (2) additional copies must be submitted to the Engineer for their review. Failure to submit drawings of the required size will be cause for their return without examination.
 2. The Engineer must be allowed the longest of the following time durations to examine design computations and working drawings:

- a. Ten (10) working days.
 - b. Two (2) working days for each drawing of a set of working drawings.
 - c. One (1) working day for every four (4) design computation sheets - any design computation sheet written on both sides to be considered as two (2) design computation sheets.
3. All time for examination must begin upon receipt of all pertinent information by the Engineer.
 4. All work must be done in accordance with the approved working drawings. The Contractor must have approved working drawings prior to the start of any work.
 5. The Contractor must bear all costs or damages, which may result from the ordering of any materials or equipment or the use of any preparatory labor prior to the approval of the working drawings.

F. **Installation Details:**

1. **Structural Steel.** All structural steel work, including, but not limited to fabrication, inspection, transportation and erection must be done in accordance with the provisions of the current NYS Steel Construction Manual.
2. **Excavation and Backfill.** All excavation and backfilling must comply with the provisions of Section 206 of the NYSDOT Standard Specifications as follows:

The excavation must be dewatered when necessary and kept free from water, snow and ice during construction. Special care must be taken not to disturb the bottom of the excavation and not to remove the material at final grade until just before the structure is placed. The Contractor must be responsible at all times for the carrying out of all excavation operations in a safe and prudent manner so that the workers, public, and adjacent public and private property will be protected from unreasonable hazard.

All applicable local, State and/or Federal requirements must be observed and necessary permits acquired by the Contractor.

The Contractor must comply with the Contract Plans for proper securement of work zone when trenches are left open overnight and non-work days. Sheeting must be used in conformance with Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction (OSHA) to protect employees and to satisfactorily complete the work without causing subsidence and to prevent damage to adjacent ground and structures. These requirements are minimum standards and may have to be increased depending on field conditions or as directed by the Engineer. Instead of using sheeting, the Contractor may with written approval from the Engineer, open the excavation with the sides sloped to a stable slope not steeper than that allowed by OSHA. Taking this option, however, does not relieve the Contractor of his/her responsibilities as stated herein. Where the Contractor is permitted to do this, the materials used and method of construction outside the payment lines must be the same as those required for adjacent zones within the payment lines.

When excavation is required for the installation of conduits, the Contractor must notify the Engineer upon completion of the excavation. No conduit must be placed in the excavation until the Engineer has approved the depth and cross-section. Costs to include all dewatering, where necessary.

Conduit trench bases must be smooth and free of any vertical projections larger than 3 inches. Conduit must be placed on a compacted bed of four (4) inches of sand with spacers to maintain two (2) inches spacing horizontally and vertically between each conduit. Twelve (12) inches of sand must be placed over the conduits. Warning tape must be placed on top of the sand fill.

All trenches must be backfilled or steel plated at the end of each day. Steel plates must be spiked and ramped to secure their location and to minimize tripping hazards where the excavation will be exposed to the public and/or traffic. Contractor must be responsible for the proper disposal of all spoils and discharged water from trenching operations and/or the pumping of existing NYCDPR manholes.

For waterproofing of manhole in place, the excavation must be of a sufficient length and width to allow the placement of waterproof coating to the exterior, including the roof.

3. **Placement of Concrete.** All concrete placement must be in accordance with the applicable requirements of the following Subsections of the NYS Department of Transportation Specifications:
555-3.02, 555-3.03A, 555-3.04, 555-3.06, 555-3.07, 555-3.08 and 555-3.09.
4. **Demolition of Existing Manhole.** Where existing manhole containing active cables is to be demolished, the location will be shown on the Contract Drawings. The existing active cables must be temporarily supported until completion of the installation of the new manholes.

Where indicated all demolished manhole must be replaced with cast-in-place reinforced concrete manholes of the same interior volume.

All exposed cables and splice cases must be provided with a single watertight protective box system - using fire retardant wood having a flame spread of twenty-five or less when tested in accordance with ASTM E84. The box system must be built with a removable watertight top or hatch, to allow safe and adequate access to the cables by the Engineer in consultation with NYCDPR. The box system around existing splice cases must be similar in dimension/volume to the demolished manhole. Attachment of cable support/racks to the walls of the temporary structure must be consistent with those found in the original manhole. Shop drawings detailing the method of support, including structural members, will be required.

Immediately upon exposure of cables, the Engineer in consultation with NYCDPR must inspect all cables for damage or air leaks. Lead sheathed cables will require encasement by the Engineer, utilizing heat shrink. The Contractor must anticipate having the Engineer and equipment on site, during

normal working hours, performing this operation. Breaking out of manholes containing active cables must be done utilizing methods to ensure that no cables or splice cases will be damaged.

Prior to the removal of the manhole roof, plywood and bracing of sufficient strength to absorb the shock and weight of falling demolished material must be placed above the cables and splice cases.

Once the roof is removed, the cables and splice cases must be shifted from the racks to an approved temporary support - designed and supplied by the Contractor. Adequate access and time must be anticipated. Once this has been accomplished, to the satisfaction of the Engineer in consultation with NYCDPR, the manhole walls and floors can be removed, exercising due diligence to protect the cables and splice cases. At this point, the Contractor must be prepared to stop work in this area to allow the Engineer, in consultation with NYCDPR, the time to check the cables and splice cases for damage and to repair any damage and to place heat shrink around lead sheathed cables.

G. Maintenance and Protection of Existing Cables:

- 1. General.** The existing cables, fire line and air pipes must be maintained in service and protected during all stages of the project.

The Contractor must break out the cables from their duct enclosures and simultaneously must ensure that all of the cables remain in service. Methods for manual removal of concrete encasement and ducts from around the existing cable must be limited to hammers of five (5) pounds or less and chisel point bits.

All fiber optic cables and or air pipes found in ducts must be immediately placed, after being broken out from the outer conduit and independent of the support method used, into a protective cable trough or split PVC conduits and tied back into the original duct formation. The cables must not be secured to each other. All cables in PVC conduits not encased in concrete must remain in the PVC conduits for the duration of the temporary support. Fiber optic cables found in inner duct must not be removed from the inner duct.

The Contractor must support the existing cables as shown on the contract plans or as permitted by the Engineer in consultation with NYCDPR .

Temporary supports of conduits/cables must provide for the continuous support of the conduits/cables unless directed otherwise by the Engineer in consultation with NYCDPR. Shop drawings showing the method of support must be submitted for approval.

The cables must be covered and protected at all times unless the nature of the work requires that they be exposed.

Where indicated on the Contract Drawings all cables exposed both on and off of the bridge must be protected with a fire retarded wooden box system meeting the requirements of ASTM D2898 and have a flame spread of 25 or less when tested in accordance with ASTM E84. All timbers must be labeled

with an N.F.P.A. seal. All work will be performed to the satisfaction of the Engineer in consultation with NYCDPR.

Immediately upon exposure, all cables must be inspected by the Engineer in consultation with NYCDPR for damage or air leaks.

2. **In Approaches.** All cables in the approaches will be covered in split PVC conduits.
3. **On Bridge.** Prior to removing the sidewalk or bridge deck the Contractor must determine the depth of the NYCDPR ducts at eighteen (18) feet intervals, starting at the abutment walls, utilizing hand methods agreeable to the Engineer in consultation with NYCDPR. The sidewalk or bridge deck can then be broken out utilizing hand held air hammers with spade tips only. The existing cables, fire line and air pipes must be relocated from their existing location once their duct and duct encasement has been removed, and placed in the temporary support to be installed on the bridge. Movement of the cables must be limited to the "available slack". The Contractor must coordinate the removal of the cables from their encasement and installation of the temporary support as shown on the contract plans.

Inspection. Access must be provided for the Engineer in consultation with NYCDPR to inspect the cables prior to the installation into split PVC conduits or cable trough. Lead sheathed cables will need to be encased within plastic heat shrink. Adequate time and work area must be provided to the Engineer to accomplish this task. After all cables and conduits are in their final permanent position they must again be inspected for continuity and cleanliness, and field tested, after which cover to split PVC or trough can be installed and sealed.

H) **Temporary and Permanent Support**

1. **In Approaches.** Temporary support of conduits/cables must be provided for unless directed otherwise by the Engineer in consultation with NYCDPR. Shop drawings showing the method of support must be submitted for approval. Provisions for emergency access to the cables must be provided. Support methods must also take into account the need to work on the structure below and to place and compact the backfill below the conduits while minimizing any movement/shifting of the conduits/cables.

PVC conduits (split and solid) must have all joints thoroughly cleaned with a PVC cleaning solution and cemented with PVC duct cement. Split duct PVC conduits must extend to the limits as determined by the Engineer in the field where they will be joined to the existing conduits by means of prefabricated adapters if conduits to be joined are of different shapes or sizes.

Once cables/inner ducts are placed in their final alignment split PVC conduit must be placed around them. Split conduit must be staggered top to bottom by one-half a section length, with plastic bands to be drawn hand tight around the split PVC at a maximum spacing of twenty-four (24) inches and no more than six (6) inches from each connection sleeve on either side of the joint. All restored conduit and/or trays must be tied back into the existing system utilizing adapters, either single or multiple, or in the case of trays, custom flared

transition sections sized to fit the existing conduit formation to the satisfaction of the Engineer in consultation with NYCDPR.

The excavation for the conduit must be properly backfilled in accordance with and paid under Item 203.21 Select Structural Fill of the NYS DOT Standard Specifications.

In the final permanent position, a three (3) inches minimum encasement of concrete must be placed around the split PVC conduits and the adapters to existing conduits. Encasement must terminate eighteen (18) inches beyond the end of the adapters.

2. **On Bridge.** The type of temporary enclosure which will eventually be incorporated into the permanent structure, either fiberglass tray, split fiberglass conduits or split PVC conduits, must be as shown on the Contract Drawings.

Installation Requirements:

- I. **Cable Troughs.** Troughs and hangers must be temporarily and then permanently supported as indicated on the Contract Drawing. The permanent position of the trough must continue beyond the abutments, passing through sleeves inserted in the backwall. The trough transition is indicated on the Contract Drawings. The cable trough must be supported temporarily during the bridge demolition phase as shown on the plans. The Engineer in consultation with NYCDPR must inspect all of the exposed cables prior to the cables being placed in the trough. The Contractor must support the cable trough and cables during demolition and reconstruction operations with the support system as shown on the Contract Drawings. The cable trough must follow the proposed profile of the roadway directly above each support location. Wood planking and blocking can be used to temporarily support the trough. The telephone cables must be laid on the bottom of the trough, after which time the cover must be installed and all joints caulked. Once the support systems are installed, the trough must be hung from them. The Contractor must adjust the vertical profile of the trough for the dead load deflections of the support system. The trough must remain suspended until the final trough supports are installed, at which time the trough can be seated on its final supports and the temporary support system and hanger assemblies removed. The trough must be anchored to the new steel utility supports. Trough flares in contact with the soil must be watertight. Caulking of trough covers must only take place after final inspection of telephone cables in accordance with Section - **Inspection**. Trough must be grouted into split steel sleeves in the abutment backwall. Beyond the trough transition the cables must be enclosed in split PVC conduits (2 or 4 inches dia.). All connections must be made watertight.
- II. **Temporary Structure.** The temporary structure, such as pile bents, for the support of the temporary cable support must be located and aligned in accordance with the contract plans. The Contractor must ensure that the structure and fiberglass trough do not interfere with the cables, manholes, other utilities and facilities and the existing abutment footings.

The trough must be supported on the support system following its final

profile line. Vertical and horizontal alignment adjustments will be completed during later demolition and reconstruction procedures. Movement of the support system will be limited to the available "slack" in NYCDPR cables as recommended by the Engineer in consultation with NYCDPR. Excessive movement of the cables, trough or temporary structure must not be anticipated.

The Contractor will be responsible for coordinating the manner and method of crossings for public and/or private utilities with the Engineer in consultation with NYCDPR and the affected utility. The support system must be jacked horizontally and vertically and secured in a temporary position during the removal of existing abutments. The Contractor must exercise care in handling and moving exposed cables so that no tension and/or sharp bends occur.

The bridge superstructure must then be installed followed by final adjustments to the trough. The support system must be removed, after which time, the trough must be secured to the superstructure as shown on the contract plans. The trough must be grouted into the split sleeve inserted in the abutment backwalls with non-shrink grout.

The Contractor is expressly notified that the support system is designed for its own weight, dead weight from the cables and trough, and applicable wind loads. The support system is not to be used for storage of material, as a pedestrian walkway -- either temporarily or permanently -- or for a use other than that intended in its design.

If the Contractor wishes to modify the support system from that shown on the contract plans, he/she must hire a Professional Engineer, licensed in the State of New York, to design and subsequently prepare the necessary plans and specifications for its construction and to submit those plans to the Engineer for their approval. Submissions must be made in accordance with Section - **Construction Details** in this specification.

- III. **Lifting Operation.** During all phases of operation, the differential lift between any two adjacent supports on a common centerline must not exceed 0.5 inch.

The Contractor must, at the earliest possible moment during or after each lift, safely secure the structure with shims, cribbing, bolsters or other suitable supports. Details to be used must be shown on the working drawings.

The lifting operations must be conducted such that the distance between fiberglass trough and the shims, cribbing, bolsters or other suitable supports do not exceed three-eighth (3/8) inch at any time.

All welding must comply with the requirements specified in the current New York State Steel Construction Manual.

The Contractor must notify NYCDPR and NYCDDC at least fourteen

- (14) days in advance of the initiation of installation work, in order that they may send an observer to monitor the installation.
- IV. **Removals.** All removal work will be done in such a manner that existing working telephone facilities are not affected. All removed materials or materials required for temporary support of the ducts, including any temporary truss structures and temporary spare conduits, must remain the property of the Contractor and must be removed from the site after the work is completed, unless otherwise agreed to with the Engineer in consultation with NYCDPR.
 - V. **Placement of Sleeves.** Sleeves for the conduits or trough passing through the abutment backwalls, must be placed on the same centerline as the conduits or trough and grouted into place using non-shrink grout. The grout must be injected from one side until all voids are filled. The details of the sleeves are shown on the Contract Drawing.
 - VI. **Spare Conduits.** Solid spare fiberglass conduits must be installed on the bridge as shown on the Contract Drawings and connected to existing manholes or conduits as specified on the Contract Drawings.

All conduit joints must be cleaned prior to applying the adhesive. All manufacturer's recommendations concerning the method and manner of joining the ducts must be followed to insure a structurally sound and watertight joint. All joints/couplings must be installed in a staggered pattern.

The Contractor will provide expansion joints for the conduits. The expansion joints must be placed in a staggered pattern at the fixed end of the bridge to the satisfaction of the Engineer in consultation with NYCDPR. The expansion setting is shown on the Contract Drawings. No joints or expansion couplings must fall within twelve (12) inches of the abutment faces.

After passing through the abutment backwall, a minimum of thirty-six (36) inches of cover must be maintained over new fiberglass conduits. The new fiberglass conduits on bridge are to be joined to new PVC conduits off bridge which are joined to new or existing manholes or conduits, or terminated as shown on the Contract Drawings.

3. Beyond Bridge.

- I. All new conduits beyond bridge limits that have less than twenty-four (24) inches of cover must be encased in concrete (minimum 3 inches thick). All new conduits beyond abutment backwalls that have less than eighteen (18) inches of cover must have three-eighths (3/8) inch steel protection plates directly above in addition to the concrete encasement. All steel protection plates must have a minimum overlap of three (3) inches, each side.
- II. Concrete encasement of conduit(s) to extend three (3) inches above and to either side will be required for or at all bends (sweeps), adapters, changes in grade, entering or leaving manholes, passing over or under water mains, building entrances and as directed by the Engineer in consultation with NYCDPR. The Contractor will be responsible for coordinating the manner and method of crossings for public and/or private

utilities with the Engineer in consultation with NYCDPR and the affected utility.

- III. All conduits must be laid as called for in the Contract Drawings in either a straight line or a smooth curve with no irregularities. The number of conduit couplings must be limited by using as many standard lengths as practical. All joints must be tight and free of burrs. All work must be strictly in accordance with the requirements and recommendation of the manufacturer to form a watertight joint.
- IV. Bends must be limited to sweeps with a minimum radius of fifteen (15) feet and a maximum angle of $22\frac{1}{2}$ degrees unless otherwise directed by the Engineer in consultation with NYCDPR. Substitution of elbows for sweeps will not be accepted.
- V. All connection joints must be staggered by a minimum of six (6) inches.
- VI. The Contractor will be responsible for all conduits splaying if necessary to pass over or under existing or planned public or private facilities. Method and manner of conduit splaying must be as directed by the Engineer in consultation with NYCDPR.
- VII. The Engineer will supply the depth at which the conduit will leave or enter the manhole. The Contractor must confirm with the Engineer as to the method and manner in which the new conduit will be brought into or out of the manhole.
- VIII. Conduits not terminating at a manhole must be plugged.
- IX. The final layout/route of new conduits, for permanent or temporary use, must be directed by the Engineer in consultation with NYCDPR.

I) **Maintenance of Existing Facilities.**

It will be the Contractor's responsibility to maintain and support buildings, foundations, retaining walls, poles, light stanchion stand, other aerial structures as well as underground structures such as water, gas, sewer, fire, electric, telephone, cable TV, police and all roadways, lawns and sidewalks adjacent to or near trench as directed by the Engineer in consultation with NYCDPR.

J) **Emergency Use Conduits.**

A minimum of two (2) solid 4" or 2" PVC or fiberglass conduits must be installed on the bridge and connected to existing manholes or spare conduits as shown or specified on the Contract Drawings prior to commencing removal of existing encasement and conduits enclosing cables. The Engineer must determine the size of the emergency conduits to be constructed in consultation with NYCDPR.

K) **Test Pits.**

Test pits, if required must be at the discretion of the Engineer and must be deemed included in the price of this Item. This work must conform to the requirements of Section 7.16 of the NYC DOT Standard Highway Specifications.

L) **Finishing and Testing of New Conduits.**

All conduits are to be finished and tested on completion of backfilling but prior to pavement restoration or sealing of enclosure as follows:

- a. A duct rodding device connected to a one-quarter ($\frac{1}{4}$) inch polypropylene rope must be passed through each completed conduit from manhole to manhole to check for continuity and obstructions. Following the duct rodding, a mandrel, preceded by wire brush tied to the same rope and of a size not less than the

inside diameter of the conduit minus one-quarter ($\frac{1}{4}$) inch, must be pulled through the conduit once in each direction. The Contractor must furnish the duct rodding device, wire brush, mandrel and all other materials necessary for the above-mentioned conduit inspection.

- b. Inspection procedures must be performed by the Contractor in the presence of the Engineer in consultation with NYCDPR. Final acceptance will be given when all conduits display free passage in both directions with the wire brush and mandrel as specified above. Any conduit which rejects the mandrel must be cleared at once and the Contractor must bear all costs to replace defective conduit.
- c. After the acceptance of the conduits installed, conduits must be equipped with a three-eighth ($\frac{3}{8}$) inch pull rope and capped.
- d. Final pavement restoration must be performed in accordance with the Contract Plans and to the satisfaction of the Engineer in consultation with NYCDPR.

PK-643.4 METHOD OF MEASUREMENT.

Payment under this item must be made according to a lump sum for the installation, protection and maintenance of NYCDPR facilities, as shown on the Contract Drawings, or as directed by the Engineer, in accordance with the requirements of these specifications.

PK-643.5 PRICE TO COVER.

The price will be a lump sum for Installation of New NYCDPR facilities and Support, Protection and Maintenance of Existing facilities and must include the cost of all labor, materials, plant, equipment, insurance and incidentals necessary to install new facilities, maintain, protect and support the telephone conduits, cables, and manholes, and perform all work necessary to complete the work as described in this specification and as shown on the Contract Drawings, or directed by the Engineer, in accordance with the requirements of these specifications.

Payment will be made under:

Item No.	Item	Pay Unit
PK-643	MAINTENANCE, PROTECTION AND INSTALLATION OF NYCDPR FACILITIES	LUMP SUM

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**NYSDOT
SPECIFICATIONS
REFERENCES**

**NYSDOT SPECIFICATION
REFERENCE PAGES**

CONTRACT HBPED800Q

The following pages provide the parameters for using
New York State Department of Transportation (NYSDOT) Specifications
as part of the Contract Work.

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TABLE OF CONTENTS

NYS DOT SPECIFICATIONS1

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NYSDOT SPECIFICATIONS

All requirements as defined in the City of New York Standard Construction Contract ("Standard Construction Contract") are to be followed. NYSDOT specific construction management and contractual requirements that are referenced in NYSDOT specifications are not to be inadvertently incorporated or take precedent over Contract Requirements, including the Standard Construction Contract, Special Specifications or Provisions, the New York City Department of Transportation Standard Highway Specifications, or the New York City Department of Environmental Protection Standard Sewer and Water Specifications.

References are made herein to certain NYSDOT specifications. All references to the "Department", "Materials Bureau", "Regional Engineer", "Regional Landscape Architect", "Landscape Architect", "DCES", or other reference to NYSDOT offices or personnel are deemed to mean the "ENGINEER" as that term is defined in the Standard Construction Contract. However, where references are made to materials or Contractors or subcontractors being required to appear on NYSDOT approved lists, these references and requirements remain unchanged.

Reference to NYSDOT specifications will not be deemed to imply NYSDOT or New York State involvement in any testing and approval of materials or in the supervision of construction. In the event of a conflict, the Standard Construction Contract, the Contract Drawings and New York City Specifications will prevail over any NYSDOT specifications, unless the ENGINEER directs otherwise.

ITEM NUMBER	SPECIFICATION NAME	SPECIFICATION TYPE
202.120001	REMOVAL OF EXISTING SUPERSTRUCTURES	NYSDOT STANDARD
203.21	SELECT STRUCTURAL FILL	NYSDOT STANDARD
204.04	LIGHTWEIGHT CONCRETE FILL (TYPE B)	NYSDOT STANDARD
207.22	GEOTEXTILE DRAINAGE	NYSDOT STANDARD
209.22	CONSTRUCTION ENTRANCE/EXIT	NYSDOT STANDARD
551.50025	DRILLED SHAFTS (2.5 FT. DIAMETER)	NYSDOT STANDARD
553.020001	COFFERDAMS (TYPE 2)	NYSDOT STANDARD
555.0105	CONCRETE FOR STRUCTURES, CLASS A	NYSDOT STANDARD

ITEM NUMBER	SPECIFICATION NAME	SPECIFICATION TYPE
555.09	CONCRETE FOR STRUCTURES, CLASS HP	NYSDOT STANDARD
556.0201	UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUCTURES	NYSDOT STANDARD
556.0202	EPOXY-COATED BAR REINFORCEMENT FOR STRUCTURES	NYSDOT STANDARD
556.0203	GALVANIZED BAR REINFORCEMENT FOR STRUCTURES	NYSDOT STANDARD
556.03	STUD SHEAR CONNECTORS FOR BRIDGES	NYSDOT STANDARD
557.0103	SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK REQUIRED - TYPE 3 FRICTION	NYSDOT STANDARD
557.2003	STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE - TYPE 3 FRICTION	NYSDOT STANDARD
558.02	LONGITUDINAL SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE	NYSDOT STANDARD
559.01	PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS	NYSDOT STANDARD
559.02	PROTECTIVE SEALING OF NEW STRUCTURAL CONCRETE	NYSDOT STANDARD
564.510001	STRUCTURAL STEEL	NYSDOT STANDARD
564.510002	STRUCTURAL STEEL	NYSDOT STANDARD
565.2022	TYPE E.B. FIXED BEARINGS (56 TO 111K)	NYSDOT STANDARD
565.2032	TYPE E.B. EXPANSION BEARING (56 TO 111K)	NYSDOT STANDARD
567.60	ARMORLESS BRIDGE JOINT	NYSDOT STANDARD

ITEM NUMBER	SPECIFICATION NAME	SPECIFICATION TYPE
568.81	PEDESTRIAN AND BICYCLE RAILING (TWO-RAIL)	NYSDOT STANDARD
569.02	PERMANENT CONCRETE TRAFFIC BARRIER FOR STRUCTURES (HALF SECTION)	NYSDOT STANDARD
569.03	VERTICAL FACED CONCRETE PARAPET	NYSDOT STANDARD
572.010002	STRUCTURAL STEEL PAINTING: SHOP APPLIED	NYSDOT STANDARD
580.01	REMOVAL OF STRUCTURAL CONCRETE	NYSDOT STANDARD
580.04	REMOVAL OF CONCRETE APPROACH SLABS	NYSDOT STANDARD
582.06	REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH CLASS D CONCRETE	NYSDOT STANDARD
582.07	REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH VERTICAL AND OVERHEAD PATCHING MATERIAL	NYSDOT STANDARD
586.0201	DRILLING AND GROUTING BOLTS OR REINFORCING BARS	NYSDOT STANDARD
605.0901	UNDERDRAIN FILTER, TYPE 1	NYSDOT STANDARD
605.1603	PERFORATED POLYVINYL CHLORIDE UNDERDRAIN PIPE, 8 INCH DIAMETER	NYSDOT STANDARD
609.0902	OPTIONAL CURB (PRECAST CONCRETE TYPE PM4 OR CAST-IN-PLACE CONCRETE TYPE M4 OR STONE TYPE MT)	NYSDOT STANDARD
623.12	CRUSHED STONE (IN-PLACE MEASURE)	NYSDOT STANDARD

NYSDOT STANDARD SPECIFICATIONS ARE LOCATED ON THE NYSDOT WEBSITE:
<https://www.dot.ny.gov/main/business-center/engineering/specifications/2008-standard-specs-us>

PIN APPROVED SPECIFICATIONS ARE LOCATED IN THE NYSDOT PAY ITEM CATALOG:
www.dot.ny.gov/pic

NYSDOT Special Specifications utilized in this Project are located in Volume 3 of 3, I-pages.

S - PAGES

GENERAL AND SPECIAL PROVISIONS:

- (A) GENERAL PROVISIONS**
 - (B) HIGHWAY PROJECT SPECIFIC PROVISIONS**
 - (C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS**
 - (D) GREEN INFRASTRUCTURE PROVISIONS**
-

NOTICE

THE PAGES CONTAINED HEREIN (S-PAGES) ARE GENERAL AND SPECIAL PROVISIONS THAT WILL APPLY TO AND BECOME PART OF THE CONTRACT.

(NO TEXT ON THIS PAGE)

TABLE OF CONTENTS
(A) GENERAL PROVISIONS

ARTICLE	DESCRIPTION	PAGE NO.
A	LINES AND GRADES	S-1
B	SPECIFIC TRAFFIC STIPULATIONS	S-1
C	HOLIDAYS CONSTRUCTION EMBARGO	S-1
D	CONTRACT ITEMS THAT INCLUDE BACKFILL AS PART OF THEIR WORK	S-2
E	ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES	S-2
F	DISPOSAL OF EXCESS EXCAVATED MATERIAL	S-2
G	NO EXTENSIONS OF TIME FOR WINTER SHUT-DOWN	S-2
H	PRIVATE UTILITY HARDWARE ADJUSTMENTS	S-2
I	SURVEY MONUMENTS	S-2
J	RESTORATION OF ADJACENT AREAS	S-2
K	FLAGGERS	S-2
L	FUEL COST	S-3
M	NYCDPR CONSTRUCTION PERMITS AND OTHER REQUIREMENTS	S-3
N	START OF CONTRACT WORK	S-4
O	VIBRATORY ROLLERS	S-4
P	STANDARD WORKING HOURS	S-4
Q	TREE BARRIERS	S-4
R	UTILITIES	S-4
S	HOUSE CONNECTIONS	S-4
T	STREET LIGHT AND TRAFFIC SIGNAL	S-4

ARTICLE	DESCRIPTION	PAGE NO.
U	SAW CUT	S-5
V	PRE-CONSTRUCTION STAGE	S-5
W	EXISTING SEWERS. WATER AND APPURTENANCE	S-5
X	RECONNECTING EXISTING SEWERS TO NEW MANHOLES	S-5
Y	VIBRATION MONITORING	S-5
Z	CITY ASSETS	S-6
AA	"AS-BUILT" DRAWINGS FOR WATER MAINS AND APPURTENANCES 24-INCHES (600-MM.) AND LARGER	S-6
AB	NO ADDITIONAL PAYMENT	S-7
AC	SHEETING AND EXCAVATION AT TRANSIT FACILITIES	S-7
AD	ARCHAEOLOGICAL DISCOVERIES	S-7
AE	USE OF CITY WATER	S-8
AF	PUBLIC DISSEMINATION OF INFORMATION	S-8
AG	PRICES TO INCLUDE	S-9

(B) HIGHWAY PROJECT SPECIFIC PROVISIONS

PROVISIONS

ARTICLE	DESCRIPTION	PAGE NO.
1.	SPECIFIC TRAFFIC STIPULATIONS	S-10
2.	SPECIAL EVENT CONSTRUCTION EMBARGO	S-10
3.	VALUE ENGINEERING CHANGE PROPOSAL	S-10

DRAWINGS

(NO TEXT)

(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS

PROVISIONS

ARTICLE	DESCRIPTION	PAGE NO.
1.	EXISTING SEWERS, MANHOLES, ETC.	S-18
2.	RECONNECT ALL REMAINING PIPES TO PROPOSED MANHOLES	S-18

DRAWINGS

(NO TEXT)

(D) GREEN INFRASTRUCTURE PROVISIONS

(NO TEXT)

(A) GENERAL PROVISIONS

A. LINES AND GRADES. The Contractor must furnish lines and grades in accordance with Section 1.06.27 of the NYCDOT Standard Highway Specifications, except that survey controls established for this project may no longer exist and the Contractor will be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor must check with Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.

B. SPECIFIC TRAFFIC STIPULATIONS. Under this contract, the Contractor must perform the work in strict accordance with the requirements of Section 6.70 in the Standard Highway Specifications, specific traffic stipulations as called for on the plans, Office of Construction Mitigation and Coordination (OCMC) Traffic Stipulations attached to the end of these Special Provisions, and the directions of the Engineer. In case of a conflict, the Engineer's decision will be final.

In addition, the cost of compliance with requirements of the OCMC Traffic Stipulations, unless otherwise provided for, will be deemed included in the prices bid for all scheduled items.

C. HOLIDAY CONSTRUCTION EMBARGO. A special Holiday Construction Embargo will be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below* which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During "Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers **are not** required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at:

<http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf>

Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below** between the hours of 6:00 AM and midnight unless the utility or Contractor files for an Emergency Authorization Number as required by Section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

* Please note that this embargo only applies to NYCDOT construction permits.

** List of street and maps of the affected locations are available by borough on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml>

D. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK. The following will pertain to all contract items that have backfill as a part of their work: Backfilling will comply with Subsection 4.11.3 of the Standard Specifications and no additional payment will be made for any Highway or Street Lighting work item requiring Contractor to furnish additional fill material to meet these requirements when backfilling.

E. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES. Contractor will plan and/or stage his/her work schedule using all hours/days available. Contractor is advised that all applicable unit prices will include, for the purpose of this contract, all overtime costs, premium time costs, shift differentials required to complete construction within the specified "Time(s) of Completion" stipulated in this contract.

Contractor will be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes will be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications.

F. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, will become the property of the Contractor and will be properly disposed of away from the site, at the Contractor's expense. Contaminated material will be disposed of separately in accordance with contract requirements.

G. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN. Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of December 1st through April 1st, the Contractor will NOT be granted an extension of time for completion of this contract due to the winter shut-down period, unless otherwise provided in Schedule A.

H. PRIVATE UTILITY HARDWARE ADJUSTMENTS. will be performed by the owning utility company or its agent, at its expense. The Contractor must notify the utility company 72 hours prior to start of work at each location where its hardware requires adjustment.

I. SURVEY MONUMENTS. When working in the vicinity of survey monument the Contractor will hand excavate per Item 8.02 AB-S, 8.02JA, 8.02JB, 8.02 A and 8.02 B (as applicable), at City Survey Monuments, for a distance of five (5) feet around each monument, as directed by the Engineer.

J. RESTORATION OF ADJACENT AREAS. The Contractor will be required to remove all form work. In planting strip areas, the Contractor will be required to restore areas damaged as a result of the Contractor's operations, to the satisfaction of the Engineer, with sod. The Contractor will also, as directed by the Engineer, make safe adjacent areas to the Contractor's work, such as: restoring missing or damaged pavement markings that were removed or damaged as a result of the Contractor's operations (as per requirements of Section 6.44 in the Standard Specifications); resetting granite blocks in tree pits; and, applying binder mixture (Item 4.02 CA or as applicable) where badly broken sidewalk or curb may create a dangerous condition just outside his area of operation, where and when directed by the Engineer.

All restoration work must be performed to the satisfaction of the Engineer.

K. FLAGGERS. The Contractor is notified that wherever the Item No. "6.52" and words "flagger", "flagperson" and "flagman" are used in the contract documents and drawings it will mean the Item No. "6.52 CG" and the words "Crossing Guard", respectively. The Contractor is advised that until

the Comptroller of the City of New York sets a prevailing wage rate for crossing guards, there are no prevailing wage rates for crossing guards.

For projects that require compliance with the Davis-Bacon Act, wherever the Item No. "6.52" and words "flagger", "flagperson" and "flagman" are used in the contract documents and drawings it will mean the Item No. "6.52 FED" and the words "Uniformed Flagperson", respectively.

L. FUEL COST. The Contractor is notified that the fuel cost per gallon used in the formula under Sub-Article 26.2.8 of the Standard Construction Contract for Extra Work will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA-published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1st, April 1st, July 1st and September 1st) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

M. NYCDPR CONSTRUCTION PERMITS AND OTHER REQUIREMENTS.

1. At least thirty (30) days prior to the upcoming start of construction at or near the New York City Department of Parks and Recreation (NYCDPR) land, the Contractor is required to issue a notice to NYCDPR about the start of construction activity. At least 30 days in advance of the Order to Work Date, the Contractor must notify the New York City Department of Parks and Recreation (NYCDPR) of the upcoming start of construction by emailing interagency@parks.nyc.gov.

2. Parks Construction Permits are required for all work on Parkland. Construction Permits may also be required for work on sidewalks adjacent to Parks properties or other areas maintained by NYCDPR such as Greenstreets depending on the scope of work. It is the Contractor's responsibility to coordinate with Parks via email at interagency@parks.nyc.gov to establish whether Construction Permits are required for the contract scope of work.

3. The Contractor will not be permitted to store, stage, stockpile, barricade, lay down construction materials or equipment, or otherwise impede access to Parkland, Greenstreets, or sidewalks in the right-of-way fronting Park properties unless such permission is granted by NYCDPR via issuance of a Parks Construction Permit.

4. The Contractor must obtain the necessary Parks Construction Permit from NYCDPR prior to the start of work on Parkland or areas under Parks' jurisdiction. The Construction Permit application is found online at <https://www.nycgovparks.org/permits/construction>.

5. When no Construction Permit is required, the contractor must notify Parks at interagency@parks.nyc.gov at least one week in advance of any construction adjacent to Greenstreets or in the right-of-way fronting Parks properties to allow for coordination as needed.

6. The Contractor is responsible for the protection of any Greenstreets, sidewalks, and other landscape features under NYCDPR jurisdiction that are adjacent to or enclosed by the construction area, including hardscape, landscape, shrubs, and trees. Any areas and features disturbed or damaged during construction activity are the responsibility of the Contractor to restore and repair.

7. Many NYCDPR properties are indicated on the publicly accessible online mapping resource of the New York City Department of Information Technology and Telecommunications

(DOITT) at <http://maps.nyc.gov/doitt/nycitymap/>. However, the map is not exhaustive, and Contractors should confirm Parks properties in the vicinity of their work with NYCDPR.

8. The contractor must take necessary precautions to prevent interference with or damage to utilities or other facilities during construction. The cost of all work connected with maintaining and protecting utilities affected by the work be borne by the Contractor and the cost will be deemed included in the price bid for the various items in the contract.

9. In the event the Contractor damages an existing utility or interrupts utility service, the Contractor will immediately notify its owner and the Engineer and must commence repair/replacement work as instructed by the Engineer.

10. In the event the Contractor causes an interruption in utility service, the Contractor will immediately arrange for service to be restored and may not cease the repair work until service is restored. The Contractor will not continue work until the service is restored, unless otherwise directed by the Engineer. All corrective utility work will be acceptable to the engineer and the subject utility owner.

11. If any utility service or connection of unknown ownership is encountered during construction which appears to enter or serve Parkland, Contractor must contact Parks at interagency@parks.nyc.gov to inquire if Parks is the owner of such utility.

N. START OF CONTRACT WORK. The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within 21 to 30 Days of Contract Registration.

O. VIBRATORY ROLLERS. For Federal Highway Administration (FHWA) project the use of vibratory rollers is prohibited within the project limits.

P. STANDARD WORKING HOURS: In absence of OCMC Traffic Stipulations, standard working hours are 7:00 A.M. and 6:00 P.M., Monday through Friday. Work performed outside the standard working hours must be pre-approved by DDC.

Q. TREE BARRIERS. The Contractor will furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers will be Type B, unless otherwise directed by the Engineer, and will be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.

Price of the tree barriers must be included in the in the unit prices bid for all scheduled items.

R. UTILITIES. All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.

S. HOUSE CONNECTIONS. All existing house connections will be maintained and supported during construction. The Contractor will replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.

T. STREETLIGHT AND TRAFFIC SIGNAL. The Contractor is responsible for any damage to the existing street lighting and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work will be performed according to NYCDOT Bureau of Traffic's Standard

Drawings and Specifications and City of New York DOT System Engineering Specifications (dated November 2013) at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical contractor to perform all traffic signal work (if any). For list of approved electrical contractors, contact Bjorn Seedan or James Celentano, New York City Department of Transportation at (212) 839-3790.

U. SAW CUT. The Contractor is advised that where the existing roadway pavement is designated to be replaced from curb to curb, then no full depth saw cutting of pavement for sewer and water main trenches will be required, except at the limits of full width pavement restoration. No separate or additional payment will be made for any saw cutting.

V. PRE-CONSTRUCTION STAGE. The Contractor is advised that the Base Contract Duration (consecutive calendar days "ccds") must also include pre-construction stage from the Notice To Proceed date. During this stage the Contractor is required to submit the necessary shop drawings, obtain all permits and submit the health and safety plan for review and approval. The Engineer's field office will also need to be established during this pre-construction stage period. Failure to comply with the pre-construction stage requirements may result in assessing liquidated damages to the Contractor for everyday beyond the pre-construction stage duration. The liquidated damage will be of equivalent value as identified in the Schedule A for work beyond the construction completion date.

W. EXISTING SEWERS, WATER AND APPURTENANCE. The Contractor is notified that at some locations there may exist sewers, manholes, water mains, etc., which are to remain undisturbed and are in close proximity to the line of the proposed work. The Contractor exercise extreme care, minimize the trench width of the proposed sewers and take all necessary precautions in placing sheeting and during excavation of the trenches to prevent any damage to the existing structures, pavement, curbs, and sidewalks that are to remain while working adjacent to them. The Contractor maybe restricted to use wood sheeting at certain critical locations as directed by the Engineer. Should any damage occur to any portion of the existing structures that are to remain due to the Contractor's operations, the Contractor will make all repairs to the existing structures to the satisfaction of and as directed by the Engineer. The cost of such repair will be borne by the Contractor, at no cost to the City. Additional cost to use wood sheeting specifically to ensure integrity of existing sewer structures will be deemed included in all bid items for work.

X. RECONNECTING EXISTING SEWERS TO NEW MANHOLES. If there are locations on the contract plans, where the Contractor is required to reconnect all existing sewers to the proposed manholes in this contract. The said manholes will be fabricated to provide openings for the existing sewers at the specified invert elevations as shown on the contract drawings. The cost of reconnecting existing sewer pipes to new manholes, including concrete collar with steel reinforcements and/or grouting around the existing sewer pipes at the openings and all work necessary to complete the pipe reconnection, to the satisfaction of the Resident Engineer will be deemed included in the prices bid for all items of work. No additional payment will be made.

***[ARTICLE "Y" IS ONLY APPLICABLE IF ITEMS FOR VIBRATION MONITORING
ITEM NO. 76.31 IS IN THE BID SCHEDULE]***

Y. VIBRATION MONITORING. In case of structures requiring vibration monitoring, the Contractor, in addition to Continuous Real Time Monitoring for Vibrations as determined in the Construction Report must provide Continuous Real Time Monitoring for Vibrations of existing buildings/structures adjacent to or in the proximity of different types of construction activities being conducted including, but not limited to, installation of sheeting for construction of proposed water and

sewer mains, installation of sheeting for excavation of jacking/receiving pits, direct jacking of sewers, piling work or as directed by the Engineer.

Z. CITY ASSETS. The Contractor is advised that any City owned light poles, traffic signals, street name signs, traffic signs and encumbrances including, but not limited to, underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances will be replaced in kind and as directed by the Engineer. The cost of such work will be deemed included in the prices bid for all items of work under this contract.

[ARTICLE "AA" IS ONLY APPLICABLE FOR WATERMAIN 24-INCHES AND HIGHER]

AA. "AS-BUILT" DRAWINGS FOR WATER MAINS AND APPURTENANCES 24-INCHES (600-MM.) AND LARGER: Upon the completion of the work for each Capital Project and as a condition precedent to obtaining the certificate for substantial completion for each Capital Project under Article 44 of the Contract, the Contractor will furnish "As-Built" drawings for water mains and appurtenances 24-inches and larger to the City. The Contractor will prepare and submit the "As-Built" record drawings to the Engineer for approval. Approved "As-Built" drawings will be delivered to the Department of Design and Construction, 30-30 Thomson Avenue, Long Island City, New York, 11101-3045. The following guideline is provided for the preparation of "As-Built" record drawings:

1. The Contractor will prepare the "As-Built" drawings on AutoCAD and will provide to the City two (2) sets of Mylar and AutoCAD files on a CD. The drawings on CD's and the plotted Mylar's will conform to the standard size of 22" x 36" (559-mm. x 914-mm.) using a 1"=30' (1:360) horizontal and 1"=10' (1:120) vertical scale. The Mylar will be 3-mil in thickness.

2. The "As-Built" drawings will include but not be limited to the following guidelines summarized below:

(a) Drawings will consist of the same legend and layout of title boxes shown on the contract drawings.

(b) Each plotted Mylar drawing will contain the signature and stamp of the Contractor's NYS Professional Engineer/Registered Architect.

(c) The drawings will include:

- street name and crossing street(s) or distance from;
- north arrow;
- property lines and widths;
- legal and existing street widths, street alignment and grades;
- "new" curb lines and widths;
- water main center line measured off the "new" curb line;
- horizontal stationing for all valves, hydrants, outlets, blow-offs, house service connections, etc., measured on a horizontal line as established by the Borough Office Bureau of Topographic;
- alignment and appurtenance location stationing, and deflection angles;
- cover and elevations (Datum used will be that of the Borough where work is located);

- location of pipe joints;
- profile of all piping;
- complete details of all outlet piping roundabouts;
- complete details of all blow-off connections to the sewer;
- complete details of all air cocks;
- location of taps and access manholes;
- location of all cathodic protection stations;
- Venturi sensing lines plans and profiles;
- all appropriate notes.

3. The cost of preparing and submitting "As-Built" approved drawings will be deemed included in the prices bid for all scheduled bid items in the contract. No separate or additional payment will be made for this work.

AB. NO ADDITIONAL PAYMENT. The Contractor is advised that any fences, guardrails, boulders, asphalt walkway of the park, fixtures, other encumbrances removed within project limits during construction will be replaced in kind to the satisfaction of the Engineer. The cost of such work will be deemed included in the prices bid for all contract items of work and no additional or separate payment will be made.

AC. SHEETING AND EXCAVATION AT TRANSIT FACILITIES. In case of transit facilities like MTA, LIRR, METRO NORTH etc., the Contractor will exercise extreme caution and take all necessary precautions in placing sheeting and excavation to prevent any damage to the existing underground or overhead structures and its appurtenances during construction work throughout the project area. The Contractor must take full responsibility to protect the said structures and its appurtenances, and any damage caused by the Contractor's operations must be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.

The Contractor must submit shop drawings to the Transit facilities showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor's procedure and sequence of construction, supporting and/or protection of the existing structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design will be made by a New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer's seal and signature on all drawings. The cost of this work will be deemed included in the price bid for all items of work under this contract.

AD. ARCHAEOLOGICAL DISCOVERIES. The Contractor is notified that if requested by the Resident Engineer and the City, the Contractor will be required retain the services of an Archaeologist (the "City's Archaeologist") for this project.

The City's Archaeologist will be notified in advance and will be present on site during sub-surface excavations as deemed necessary. The City's Archaeologist will be authorized to halt construction at any time in order to record and/or recover any archaeological resources encountered during excavations, and to stabilize in place any human remains encountered.

For the purpose of evaluating and recording archaeological resources, the City's Archaeologist will be allowed to enter trenches provided all standard safety requirements are met. It is understood that some construction down time may be necessary.

In the event that human remains, and/or other significant archaeological deposits are encountered during construction or archaeological investigations, Landmarks Preservation Commission (LPC) will be notified as directed by the City's Archaeologist and the State Historic Preservation Office (SHPO) requires that the following protocol is implemented:

1. At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.
2. Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
3. The County coroner and local law enforcement as well as the SHPO and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archeological. If the remains are archeological in nature, a bio-archaeologist will confirm the identification as human.
4. If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their protection or removal can be generated. The involved agency will consult SHPO and appropriate Native American groups to determine a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance.
5. If human remains are determined to be Euro-American, African- American, etc., the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.

Should extra work be ordered by the Resident Engineer as a result of any archaeological discoveries, it will be paid for from the Fixed Sum included in, and in accordance with Item HW-908 Allowance for Extra Work Due To Archaeological Discoveries.

AE. USE OF CITY WATER. Please refer to NYCDOT STANDARD HIGHWAY SPECIFICATIONS (May 16, 2022), Sub Section 1.06.23 (A), Rules, Laws, and Requirements, for use of City water.

AF. PUBLIC DISSEMINATION OF INFORMATION. The Contractor agrees to hold confidential, both during and after the completion or termination of this Contract, all of the reports, information, or data, furnished to, or prepared, assembled or used by, the Contractor under this Contract. The Contractor agrees to maintain the confidentiality of such reports, information, or data by using a reasonable degree of care, and using at least the same degree of care that the Contractor uses to preserve the confidentiality of its own confidential information. The Contractor agrees that such reports, information, or data will not be made available to any person or entity without the prior written approval of the Commissioner. The obligation under this Section to hold reports, information or data confidential will not apply where the Contractor is legally required to disclose such reports, information or data by virtue of a subpoena, court order or otherwise ("disclosure demand"), provided that the Contractor complies with the following: (1) the Contractor will provide advance notice to the Commissioner, in writing or by e-mail, that it received a disclosure demand for such reports, information or data and (2) if requested by the Commissioner, the Contractor will not disclose such reports, information or data until the City has exhausted its legal rights, if any, to prevent disclosure of all or a

portion of such reports, information, or data. The previous sentence will not apply if the Contractor is prohibited by law from disclosing to the City the disclosure demand for such reports, information or data.

The Contractor will restrict access to confidential information to persons who have a legitimate work-related purpose to access such information. The Contractor agrees that it will instruct its officers, employees, and agents to maintain the confidentiality of any and all information required to be kept confidential by this Contract.

The Contractor, and its officers, employees, and agents will notify the Commissioner, at any time either during or after completion or termination of this Contract, of any intended statement to the press or any intended issuing of any material for publication in any media of communication (print, news, television, radio, internet, etc.) regarding the services provided or the data collected pursuant to this Contract at least twenty-four (24) hours prior to any statement to the press or at least five (5) business days prior to the submission of the material for publication, or such shorter periods as are reasonable under the circumstances. The Contractor may not issue any statement or submit any material for publication that includes confidential information as prohibited by this Section.

At the request of the Commissioner, the Contractor will return to the Commissioner any and all confidential information in the possession of the Contractor or its subcontractors. If the Contractor or its subcontractors are legally required to retain any confidential information, the Contractor will notify the Commissioner in writing and set forth the confidential information that it intends to retain and the reasons why it is legally required to retain such information. The Contractor will confer with the Commissioner, in good faith, regarding any issues that arise from the Contractor retaining such confidential information. If the Commissioner does not request such information, or the Law does not require otherwise, such information will be maintained in accordance with the requirements set forth in the Contract Documents.

AG. PRICES TO INCLUDE. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

(B) HIGHWAY PROJECT SPECIFIC PROVISIONS

1. SPECIFIC TRAFFIC STIPULATIONS: Under this contract, the Contractor must perform the work in strict accordance with the stipulations of as listed below and in coordination with NYCDPR.
 - A) No parking of Contractor's personal vehicles will be permitted outside of designated existing parking lots.
 - C) The Contractor shall notify the New York City Department of Parks and Recreation (NYCDPR), New York City Police Department (NYCPD), and the Fire Department of the City of New York (FDNYC), at least 20 days before the start of construction to schedule a pre-construction meeting.

2. SPECIAL EVENT CONSTRUCTION EMBARGO: All maintenance and protection lane closures and detours shall be coordinated with the New York City Department of Parks and Recreation (NYCDPR).
 - A) Contractor shall be aware that no work will be allowed at the request of NYCDPR during NY Mets baseball, USTA tennis events, including the U.S. open, and other large-scale public events.
 - B) Contractor shall be aware that during large-scale public events, direction of roads is subject to change by the New York Police Department (NYPD).
 - C) USTA Lot C will not be available for Contractor staging prior to and during the U.S. open.

3. VALUE ENGINEERING CHANGE PROPOSAL:

A. Purpose and Scope. The purpose of a Value Engineering Change Proposal (VECP) is to encourage the use of the Contractor's ingenuity and experience in arriving at alternative construction designs, methods, and procedures that result in a lower direct cost to accomplish a contract requirement. It is the intent of this provision to share with the Contractor any substantial direct cost savings which may be generated as a result of a VECP offered by the Contractor and approved by the Engineer. A VECP is a Contractor-initiated change request. If approved, the changes and payments will be authorized through the change order process. Before a VECP can be implemented, it must pass through three approval processes: conceptual approval, formal approval, and change order approval. To expedite the review process, the Contractor has the option of jointly submitting the conceptual VECP and the formal VECP for simultaneous review. If the VECP receives formal approval, as part of the change order process the Contractor may request that the Engineer consider granting advanced authorization of extra work.

The VECP should produce direct cost savings to the City and the public without, in the sole judgment of the Engineer, impairing essential functions and characteristics of the facility including but not limited to service life, economy of operation, ease of maintenance, desired appearance, and safety. The Contractor, when developing a VECP, shall address the designer's objectives, environmental permit requirements and regulations, commitments made to the public to mitigate the impact of construction, and other such concerns.

The "direct cost savings" is the difference of the "construction savings" generated by implementing the VECP minus reasonable "design costs" associated with the VECP. The "construction savings" is the difference between what it would cost to complete all the contract work without implementing the VECP and the cost to complete all the contract work if the VECP is implemented. This includes any changes to quantities or unit prices across the entire contract if affected by the VECP. If the estimated cost to complete all the contract work without implementing the VECP differs from the contract bid amount for the work, supporting documentation to explain the variance shall be provided. Reimbursable "design costs" are specific to engineering changes (examples: design changes, plan sheet revisions, and quantity estimating). Expenditures toward proposal preparation (examples: scheduling, documentation, cost analysis, material research, etc.) are not reimbursable.

Indirect cost savings (time, user delay, railroad force account costs, inspection costs, etc.), although considered when reviewing the merits of the VECP, are not reimbursed. A VECP may alter the progress schedule and milestone dates, which in turn could affect time-related contract provisions.

Proposals that reduce the time to complete the contract, and only result in indirect cost savings, may be accepted based on the mutual benefit derived. These proposals will be evaluated in accordance with sub-provision **F. Time Savings**, below.

B. Submittal of Conceptual VECP. A conceptual proposal is required for all VECP. It should outline the general technical concepts associated with the VECP and the estimated direct cost savings which may result. Upon review by the Engineer, one of the following actions will be taken:

- Conceptual approval and a request for the Contractor to submit a formal VECP.
- Request for additional information.
- Rejection of the VECP.

The Contractor shall submit an original and three copies of the conceptual VECP to the Engineer along with any additional information requested by the Engineer. The conceptual VECP should contain sufficient information for concept review and evaluation, including the following as a minimum:

1. Conceptual VECP Summary. A summary of the VECP identified as "Conceptual VECP" which includes:
 - a. Short title (description) of the VECP (10 or less words).
 - b. Contract information (Contract ID number, contract description, contractor).
 - c. Original total contract bid price.
 - d. Estimated contract cost. This may be different from the original total contract bid price due to addition or alteration of work (i.e., the estimated cost to complete the work if the VECP is not implemented). The Engineer must concur with the estimated contract cost.
 - e. Estimated contract cost if the VECP is implemented (excludes VECP design cost and any VECP construction savings reimbursement).
 - f. Estimated VECP construction savings (Item d. minus Item e.).
 - g. Estimated VECP design cost (Not all VECP will have design cost).
 - h. Estimated direct cost savings due to the VECP (Item f. minus Item g.).
 - i. Fifty percent of the estimated direct cost savings (This should equal the overall savings to the City).
 - j. Estimated total adjusted contract cost if VECP is implemented (includes VECP savings and design cost reimbursements).
 - k. The type of VECP (either "Cost Savings" or "Time Savings Only").

- l. Date by which the authorization of extra work (change order) must be granted.
 - m. Identification of any new or existing contract pay items requiring agreed prices.
 - n. Identification of any materials with long lead times (to order, fabricate, deliver, etc.) that may require purchase authorization from the Engineer prior to formal approval/disapproval of the VECP, or may delay the implementation of the VECP. Identify any date by which authorization to order these materials must be received without affecting the progress schedule.
 - o. A basic description of the VECP and associated benefits and impacts (progress schedule, environmental, maintenance & protection of traffic, quality, etc.).
2. Conceptual Plans. Conceptual plan drawings.
 3. Design Criteria. If the VECP proposes design changes, supporting technical design criteria shall be provided.
 4. Schedules.
 - a. The most recently approved baseline progress schedule.
 - b. The most recently approved construction progress schedule update.
 - c. A draft, proposed, revised progress schedule illustrating the impacts of the VECP. The schedule shall identify: (1) the time required to develop a formal VECP; (2) the time required to order, fabricate, and deliver materials with long lead times; (3) the time required to obtain any environmental permits or other required approvals; (4) any anticipated progress schedule changes (contract completion date, milestone dates, task durations, etc.); (5) the latest date by which authorization of the VECP extra work must be granted without affecting the schedule.
The draft progress schedule should provide a sufficient level of detail upon which the reasonableness of the VECP can be determined.
Should the Engineer find that insufficient time is available for review and processing, it may reject the VECP solely on such basis. If the Engineer fails to respond to the VECP by the date specified, the Contractor will consider the VECP rejected and will have no basis for a dispute against the City as a result thereof. The Engineer may accept a VECP that requires a contract time extension if sufficient cost savings are anticipated.
 5. Estimate of costs. The conceptual VECP estimate of costs should include sufficient information to determine the reasonableness of the VECP. If the proposal requires the ordering of materials, the Contractor needs to provide documentation from the suppliers to justify the cost of the materials.
 6. Previous Use or Testing. A description of any previous use or testing of the VECP on another City contract or elsewhere, the conditions and results therewith. The Contractor shall submit the technical aspects of the VECP in sufficient detail so the Engineer can determine the suitability of the VECP from an engineering perspective. If the technology is new, test information shall be provided to the Engineer's satisfaction. If a similar VECP was previously submitted on another City contract, indicate the date, contract number, and the action taken by the City.

C. Submittal of Formal VECP. Upon notification by the Engineer that the conceptual VECP is approved and a formal VECP is necessary, the Contractor will submit to the Engineer an original and three copies of the following materials and information for each formal VECP along with any additional information requested by the Engineer:

1. Formal VECP Summary. A summary of the VECP, identified as "Formal VECP", which follows the conceptual VECP summary format and information requirements (Information and estimates may have changed since the conceptual VECP).
2. Complete Plans and Specifications. Complete plans and specifications, which meet City standards, showing the proposed changes relative to the original contract features and requirements. The City requires a Professional Engineer's stamp and signature on any significant engineering changes.
3. Field Change Sheets. Field change sheets and/or shop drawings. If the VECP results in a field change, and those items affected require the submission of shop drawings, the shop drawings will not be accepted unless accompanied by corresponding field change sheets.

Documents shall be developed in compliance with City requirements. The City requires a Professional Engineer's stamp and signature on any significant engineering changes.
4. Schedules. The same information requirements as for the conceptual VECP apply, except that a formal, proposed, revised progress schedule is required.
5. Cost Analysis. A complete cost analysis indicating quantity changes, unit price changes, and new contract pay items. As a minimum it shall include:
 - a. An itemized comparison of estimated costs to complete all the contract work with implementing the VECP and without implementing the VECP.
 - b. Proposed unit prices for any new contract pay items introduced by the VECP and appropriate documentation for review under the Agreed Price process.
 - c. Proposed unit prices for any existing contract pay items for which agreed prices are sought due to a significant change in character of work (quantity or complexity). Appropriate documentation for review under the Agreed Price process is required.
 - d. The cost of any items with long lead times (e.g., materials ordered) required after conceptual approval and before final approval shall be identified.
6. Differences. Full descriptions of the difference between the existing contract requirements and the proposed changes, and the comparative advantages and disadvantages of each, including considerations of service life, economy of operation, ease of maintenance, traffic flow, safety, desired appearance, progress schedule, and any increase/reduction of environmental impacts.
7. Technical Presentation. The Contractor may be required to conduct a technical presentation as part of the review process.
8. Cost Documentation. All formal VECP costs submitted shall be supported by documentation as required by Article 26 of the Standard Construction Contract.

The Engineer will not formally approve any VECP until all required VECP documentation has been submitted and is acceptable to the Engineer.

A formal VECP may be submitted concurrently with the conceptual VECP, however, the Contractor assumes any costs associated with the formal VECP at its own risk. Reimbursable costs will be considered only if the conceptual VECP is approved. Clearly identify whether a VECP is being submitted for conceptual approval, formal approval, or both.

Once a formal VECP has been approved, the VECP will then be submitted as a change order and processed accordingly. The Contractor is responsible for submitting all appropriate information to the Engineer in a timely manner.

D. Conditions. The Contractor shall not base any bid prices on the anticipated approval of a VECP and should recognize that any VECP may be rejected. The following terms and conditions apply to VECP:

1. A VECP will only be considered after the contract is awarded.
2. A VECP applies only to the contract for which it was submitted. One VECP shall not be submitted for multiple contracts. Approval or disapproval of a VECP on one contract does not guarantee approval or disapproval on another contract.
3. The VECP becomes the property of the City and will contain no restrictions imposed by the Contractor on its use or disclosure. The City will have the right to use, duplicate, and disclose in whole or in part any data necessary for the utilization of the VECP. The City retains the right to utilize any accepted or rejected VECP or part thereof on any other project without any obligation to the Contractor.
4. Approval of the conceptual VECP in no way obligates the Engineer to approve the formal VECP. The Contractor will have no claim against the City as a result of the rejection of any such conceptual or formal VECP except as otherwise provided in **Sub-Provision E.4**, below.
5. When the Engineer is in the process of making design and specification revisions and a Contractor submits a VECP with similar revisions, the Engineer will reject the VECP and proceed without any obligation to the Contractor.
6. A VECP will be considered only if reasonable, cost-effective options are not provided in the contract documents.
7. The Engineer will be the sole judge as to whether a VECP qualifies for consideration and evaluation. It may reject any VECP that requires excessive time or costs for design review, evaluation, and/or investigations. The Engineer will be the sole judge in determining if the proposed VECP will result in a sufficient amount of direct or indirect cost savings to offset the City's effort to review the VECP.
8. A VECP shall be consistent with DDC's design policies and basic design criteria, provide the same service life or more, facilitate economy of operations, ease of maintenance, and achieve the desired appearance and safety.
9. A VECP will not be allowed that changes the type and/or thickness of the pavement structure and material, or solely substitutes one material for another. Examples of materials that may fall into this inappropriate substitution situation are drainage pipes, coatings, pavement markings, etc. The simple elimination of work does not necessarily constitute a VECP, however, a VECP which introduces a simple material substitution, or elimination of work, may be considered if it is accompanied by a design change or change in the construction method. A simple material substitution which introduces a new material to the DDC may be also considered.
10. The VECP will not be experimental in nature, but will have been proven to the Engineer's satisfaction under similar or acceptable conditions on another City contract or at another location acceptable to the Engineer.
11. If the Engineer requires any additional information to evaluate the VECP, this information shall be provided in a timely manner. Unless otherwise mutually agreed upon, failure to do so will result in the rejection of the VECP. An incomplete or a poor quality VECP which hinders the Engineer's review may also result in the rejection of the VECP.

12. The Contractor shall encourage submissions of VECP from an approved subcontractor, provided that reimbursement is made by the City to the Contractor and that the terms of payment to the Subcontractor are satisfactorily negotiated and accepted before the VECP is submitted to the Engineer. Subcontractors may not submit a VECP except through the Contractor.
13. A VECP approved by the Engineer is considered to be a revision to the contract documents and progress schedule. Consequently, if unsatisfactory results are being achieved or adjustments are necessary during implementation of a VECP, the rejection of work, removal of work, addition of work, or revision of work shall be evaluated in accordance with the Contract requirements.
14. All contract pay items and quantities referenced in the VECP construction savings analysis shall be Engineer-approved contract provisions. Any extra work, inclusion of an omission of work, or other field changes shall be authorized prior to use in VECP savings calculations.
15. No work related to a VECP will be performed under allowance items. Agreed prices must be reached for any contract pay items related to the VECP before the VECP is approved. If the Contractor is deemed to have taken reasonable diligence in determining the work involved but if during the construction of VECP work a significant change in the character of work occurs, the Engineer may consider new agreed prices.
16. The Contractor will receive written notification from the Engineer when the VECP is approved. Material orders placed prior to VECP approval shall be submitted at the Contractor's risk.
17. Once a VECP has been approved, the VECP will then be submitted as a change order and processed accordingly. The Contractor is responsible for submitting all appropriate information to the Engineer in a timely manner.

E. Payment. If the VECP is accepted by the Engineer, the changes and payments will be authorized through a change order. Reimbursement to the Contractor will be made as follows:

1. A VECP introduces two individual payments, one for VECP construction savings, and one for VECP design cost. The contract pay item changes along with the VECP construction savings and design cost reimbursements to the Contractor should be submitted in one change order.
2. The City will pay to the Contractor 50% of the VECP construction savings. The VECP construction savings is the difference between the actual contract costs with the VECP implemented and a detailed estimate of what it would have cost to complete the contract work without implementing the VECP, based on final construction. If final construction savings differs from the amount estimated in the formal VECP, an adjustment may be made and included in another change order. The VECP construction savings reimbursement to the Contractor will not be paid until the VECP work has been completed (progress payments on the completed VECP work are allowed). The Engineer may withhold all or a portion of the payment for the Contractor's share of the VECP construction savings until the final contract accounting. In the event that at final contract accountings the implementation of VECP actually results in no construction savings, then the Contractor will receive no VECP construction savings payment.

The Engineer is the sole judge in deciding the construction savings due to the implementation of the VECP. The Engineer will withhold VECP construction savings reimbursement until the Contractor supplies all required VECP documents.

3. If a design cost is submitted for a VECP, the City will pay to the Contractor a 50% share of the Contractor's reasonable cost for design incurred after conceptual VECP approval. If the design cost submitted for the Engineer's approval is deemed unreasonable, only 50% of the design cost deemed to be reasonable will be reimbursed. Not every VECP will have a design cost associated with it. The Engineer is the sole judge in determining the reasonableness of the design cost. Reimbursable design costs are for engineering changes. Preparation and submission of the proposal (e.g., savings analysis, progress scheduling, etc.) are not considered design costs and are not reimbursable. Reimbursable VECP design may be performed by a consultant or directly by the Contractor. The Contractor shall not be charged for, nor can the Contractor claim, any VECP design performed by the City.

The design cost shall be submitted as a lump sum item with supporting documentation. The supporting documentation shall include itemized direct salary costs (rates & hours), overhead (only for consultant design), and direct non-salary costs. Payment for direct salary costs and overhead will be limited to the current City reimbursement policies for Consultant Engineering agreements.

For consultant design, reasonable overhead on the direct technical salaries will be reimbursed. For Contractor design, overhead is not reimbursable for direct salary costs.

Overhead shall not be charged for direct non-salary costs whether incurred by the Contractor or by a consultant. Payment for direct non-salary costs will be made at actual cost paid. Although for certain direct non-salary costs (lodging, meals, mileage) the rates must meet the requirements of Comptroller's Directive 6.

The subtotal of direct salary costs, overhead, and direct non-salary costs shall be considered a "professional service fee" and reimbursed in accordance with §109-05B.3. Service Charges. A maximum 5% for the Contractor's contract supervision and overhead is allowed, in addition to any overhead submitted for consultant direct salary costs. All design costs are subject to audit.

Additional supporting documentation (receipts, time sheets, etc.) shall be supplied in a timely manner if requested by the Engineer.

In the case of a formal VECP being jointly submitted with the conceptual VECP, the City will pay to the Contractor a 50% share of the Contractor's reasonable cost for design specific to the development of the formal VECP (nothing toward the conceptual VECP) if the conceptual VECP is approved.

4. In the event of the Engineer's conceptual approval of a direct cost savings VECP, and the Contractor is directed to proceed with the VECP implementation steps and final approval is not reached, regardless of whether due to the actions of the City or the Contractor, 50% of the total reasonable design costs will still be reimbursed to the Contractor. If "advance" written approval was given to proceed with the work, procure materials, and begin fabrication; and rejection occurs, the work and fabrication costs will be reimbursed in accordance with the Standard Construction Contract. Only those materials not incorporated and unique to the contract (i.e., not restockable) will be evaluated for payment.

5. There will be no reimbursement for any costs incurred for the conceptual VECP or prior preparations.
6. If more than one VECP is approved for a contract, construction savings and design costs shall be tracked separately for each VECP.
7. When multiple submittals of information for a VECP are required to satisfy the information needs of the conceptual or formal VECP procedure, and contract timing will be negatively impacted before review and subsequent approval can be given by the Engineer, then the VECP may be rejected. In such cases, there will be no claim by the Contractor for design costs or loss of anticipated savings and/or profits.
8. VECP payments only involve direct savings or costs. Indirect savings or costs (time, user delay, contract delay, etc.) are not included in VECP payment calculations. The calculations of VECP payments are independent from the payments or penalties for contract time related issues.

If a VECP revises the progress schedule, the contract milestones upon which time related provisions are based may be affected. Time savings resulting from a VECP may be realized in a time related contract provision. Conversely, if a VECP negatively affects a progress schedule, time related contract provisions may be negatively affected.

F. Time Savings. The Engineer will consider proposals that result in time savings and at the same time may increase the cost of the contract. The Engineer will be the sole judge as to whether the benefits of completing the contract or a phase before the scheduled completion date or milestone offsets any increase in cost. These submittals, while not constituting a Value Engineering Change Proposal, will be reviewed using the VECP approval process. In addition to information required in **Sub-Provision B**, "Submittal of Conceptual VECP" above and **Sub-Provision C**, "Submittal of Formal VECP" above, the Contractor shall provide the Engineer the anticipated amount of time to be saved and sufficient information to enable the Engineer to calculate and evaluate the cost benefit of the savings in user delay. Time savings generated by the VECP may be claimed under an existing time related contract provision. If the time savings VECP increases the cost of the contract, the additional cost shall not be subtracted from any time related contract provision payments.

G. Significant Changes. Once a VECP is approved, any future significant change is no longer based on the original contract bid conditions (quantity, nature or kind of a material involved), but rather on the conditions as adjusted by the VECP (adjusted quantities, anticipated site conditions and materials, etc.).

All significant changes shall be agreed upon prior to formal VECP approval. If after formal VECP approval, an unforeseen change in the VECP work causes a significant change in the character of work, quantities and prices may be adjusted and the VECP savings shall be adjusted accordingly.

(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS

1. EXISTING SEWERS, MANHOLES, ETC. The contractor is advised that at some locations, there presently exist sewers, manholes, water mains, etc., which are to remain undisturbed and are in close proximity to the line of proposed work. The Contractor must exercise extreme care, minimize the trench width of the proposed sanitary or storm sewers and take all necessary precautions in placing sheeting, installing additional support and during excavation to prevent any damages to the said existing structures while working adjacent to them. The cost of the above work including additional supporting or underpinning design, modification of trench sheeting and all necessary work incidental thereto will be deemed to be included in the prices bid for all contract items of work. No additional or separate payment will be made. Any damage to any portion of the said existing structures due to the Contractor's operations must be repaired by him as directed by the Engineer. The cost for such repair must be borne by the Contractor solely at his own expense.

2. RECONNECT ALL REMAINING PIPES TO PROPOSED MANHOLES. At some locations as indicated on the contract plans, the Contractor is required to reconnect all existing sewers to proposed manholes in this contract. The said manholes must be fabricated to provide openings for the existing sewers at the specified invert elevations as shown on the contract drawings. The cost of reconnecting existing sewer pipes to new manholes, including concrete collar with steel reinforcements and/or grouting around the existing sewer pipes at the openings and all work necessary to complete the pipe reconnection, to the satisfaction of the Resident Engineer will be deemed included in the prices bid for all items of work. No additional payment will be made.

(D) GREEN INFRASTRUCTURE PROVISIONS

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FEMA - PAGES:

**FEDERAL EMERGENCY
MANAGEMENT AGENCY PROJECTS**

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FEDERAL EMERGENCY MANAGEMENT AGENCY (“FEMA”) FUNDING ATTACHMENT

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN

THIS ATTACHMENT IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. The riders and exhibits listed below, and included in this Attachment, are made a part of this contract documents, and the Contractor shall be responsible for compliance with all the provisions contained therein:
 - UNIFORM FEDERAL CONTRACT PROVISIONS RIDER FOR FEDERALLY FUNDED PROCUREMENT CONTRACTS (2/16/2018)
 - FEDERAL EMERGENCY MANAGEMENT AGENCY (“FEMA”) RIDER (10/27/2015)
 - FEMA EXHIBIT 2 (10/27/2015)
2. **SCOPE OF WORK SEPERATION.** This project, either in part or in whole, is eligible to receive FEMA disaster assistance funding. As a result, the scopes of work eligible for reimbursement by FEMA will be tracked separately during the construction by the Engineer. Although tracking these FEMA-funded items will be primarily be the responsibility of the Engineer, the contractor will be required to assist the Engineer in this effort.
3. **CHANGE ORDERS AND OVERRUNS.** When change orders or overruns pertain to those portions of the project eligible for reimbursement by FEMA, the Contractor must provide detailed documentation to justify the eligibility of the added work, in addition to the requirements of Articles 25 and 26 of the New York City Standard Construction Contract. At a minimum, this documentation shall include the exact location of the work, justification for changing the original scope of work (either new work or quantity changes), field sketches/as-built drawings for the added work and photographs detailing the conditions necessitating the work. The documentation shall be approved by the Engineer.

In addition, change order requests shall be formatted as follows:

- a. If contract covers work at multiple facilities and/or sites, change order requests shall identify the facility and/or site to which they apply.
- b. Change order requests shall identify the component scope to which the change applies.

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**UNIFORM FEDERAL CONTRACT PROVISIONS RIDER
FOR FEDERALLY FUNDED PROCUREMENT CONTRACTS**
(Version 02.16.2018)

[Instructions to Agencies: This Uniform Federal Contract Provisions Rider for Federally Funded Procurement Contracts (“Rider”) must be attached to all federally funded procurement contracts (of any dollar amount) that are subject to 2 CFR Part 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards). This Rider does not apply to subrecipient or subaward agreements. Procurement contracts funded by the U.S. Department of Housing and Urban Development CDBG Program or CDBG-DR Program must also include the CDBG or CDBG-DR Rider, as applicable.]

A. Definitions. As used in this Rider:

- (1) “Awarding Entity” means the entity awarding the Contract. The Awarding Entity may be the City or a contractor at any tier.
- (2) “City” means the City of New York.
- (3) “Commissioner” means the head of the City agency entering into this Contract.
- (4) “Construction” means the building, rehabilitation, alteration, conversion, extension, demolition, painting or repair of any improvement to real property.
- (5) “Contract” refers to the contract or the agreement between the Awarding Entity and the Contractor.
- (6) “Contractor” means the entity performing the services pursuant to a Contract.
- (7) “Federal Agency” means the U.S. agency or agencies funding this Contract in whole or in part.
- (8) “Government” means the U.S. government.
- (9) “Rider” means this Uniform Federal Contract Provisions Rider.

B. Termination and Remedies for Breach of Contract. The following provisions concerning remedies for breach of contract and termination apply to Contracts between the City and the City’s Contractor.

- (1) **Remedies for Breach of Contract.** If the Contractor violates or breaches the Contract, the City may avail itself of any or all of the remedies provided for elsewhere in this Contract. If there are no remedies provided for elsewhere in this Contract, the City may avail itself of any or all of the following remedies.

After declaring the Contractor in default pursuant to the procedures in paragraph (a) of subdivision (2) of this section (B) below, the City may (i) withhold payment for unsatisfactory services, (ii) suspend or terminate the Contract in whole or in part; and/or

(iii) have the services under this Contract completed by such means and in such manner, by contract procured with or without competition, or otherwise, as the City may deem advisable in accordance with all applicable Contract provisions and law. After completion of the services under this Contract, the City shall certify the expense incurred in such completion, which shall include the cost of procuring that contract. Should the expense of such completion, as certified by the City, exceed the total sum which would have been payable under the Contract if it had been completed by the Contractor, any excess shall be promptly paid by the Contractor upon demand by the City. The excess expense of such completion, including any and all related and incidental costs, as so certified by the City may be charged against and deducted out of monies earned by the Contractor.

(2) **Termination.** The City shall have the right to terminate the Contract in whole or in part for cause, for convenience, due to force majeure, or due to reductions in federal funding. If the Contract does not include termination provisions elsewhere, the following termination provisions apply:

a. **Termination for Cause.** The City shall have the right to terminate the Contract, in whole or in part, for cause upon a determination that the Contractor is in default of the Contract. Unless a shorter time is determined by the City to be necessary, the City shall effect termination according to the following procedure:

i. *Notice to Cure.* The City shall give written notice of the conditions of default signed by the Commissioner, setting forth the ground or grounds upon which such default is declared (“Notice to Cure”). The Contractor shall have ten (10) days from receipt of the Notice to Cure or any longer period that is set forth in the Notice to Cure to cure the default. The Commissioner may temporarily suspend services under the Contract pending the outcome of the default proceedings pursuant to this section.

ii. *Opportunity to be Heard.* If the conditions set forth in the Notice to Cure are not cured within the period set forth in the Notice to Cure, the Commissioner may declare the Contractor in default. Before the Commissioner may exercise his or her right to declare the Contractor in default, the Contractor must be given an opportunity to be heard upon not less than five (5) business days’ notice. The Commissioner may, in his or her discretion, provide for such opportunity to be in writing or in person. Such opportunity to be heard shall not occur prior to the end of the cure period but notice of such opportunity to be heard may be given prior to the end of the cure period and may be given contemporaneously with the Notice to Cure.

iii. *Notice of Termination.* After an opportunity to be heard, the Commissioner may terminate the Contract, in whole

or in part, upon finding the Contractor in default. The Commissioner shall give the Contractor written notice of such termination ("Notice of Termination"), specifying the applicable provision(s) under which the Contract is terminated and the effective date of termination. If no date is specified in the Notice of Termination, the termination shall be effective either 10 calendar days from the date the notice is personally delivered or 15 calendar days from the date Notice of Termination is sent by another method. The Notice of Termination shall be personally delivered, sent by certified mail return receipt requested, or sent by fax and deposited in a post office box regularly maintained by the United States Postal Service in a postage pre-paid envelope.

iv. *Grounds for Default.* The City shall have the right to declare the Contractor in default:

1. Upon a breach by the Contractor of a material term or condition of this Contract, including unsatisfactory performance of the services;

2. Upon insolvency or the commencement of any proceeding by or against the Contractor, either voluntarily or involuntarily, under the Bankruptcy Code or relating to the insolvency, receivership, liquidation, or composition of the Contractor for the benefit of creditors;

3. If the Contractor refuses or fails to proceed with the services under the Contract when and as directed by the Commissioner;

4. If the Contractor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities are indicted or convicted after execution of the Contract under any state or federal law of any of the following:

a. a criminal offense incident to obtaining or attempting to obtain or performing a public or private contract;

b. fraud, embezzlement, theft, bribery, forgery, falsification, or destruction of records, or receiving stolen property;

c. a criminal violation of any state or federal antitrust law;

d. violation of the Racketeer Influence and Corrupt Organization Act, 18 U.S.C. § 1961 et seq., or the Mail Fraud Act, 18

U.S.C. § 1341 et seq., for acts in connection with the submission of bids or proposals for a public or private contract;

e. conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any statute described in subparagraph (d) above; or

f. an offense indicating a lack of business integrity that seriously and directly affects responsibility as a City vendor.

5. If the Contractor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities are subject to a judgment of civil liability under any state or federal antitrust law for acts or omissions in connection with the submission of bids or proposals for a public or private contract; or

6. If the Contractor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities makes or causes to be made any false, deceptive, or fraudulent material statement, or fail to make a required material statement in any bid, proposal, or application for City or other government work.

v. *Basis of Settlement.* The City shall not incur or pay any further obligation pursuant to this Contract beyond the termination date set by the City in its Notice of Termination. The City shall pay for satisfactory services provided in accordance with this Contract prior to the termination date. In addition, any obligation necessarily incurred by the Contractor on account of this Contract prior to receipt of notice of termination and falling due after the termination date shall be paid by the City in accordance with the terms of this Contract. In no event shall such obligation be construed as including any lease or other occupancy agreement, oral or written, entered into between the Contractor and its landlord.

b. **Termination for Convenience.** The City shall have the right to terminate the Contract for convenience, by providing written notice (“Notice of Termination”) according to the following procedure. The Notice of Termination shall specify the applicable provision(s) under which the Contract is terminated and the effective date of termination, which shall be not less than 10 calendar days from the date the notice is personally delivered or 15 days from the date the Notice of Termination is sent by another method. The Notice of Termination shall be personally

delivered, sent by certified mail return receipt requested, or sent by fax and deposited in a post office box regularly maintained by the United States Postal Service in a postage pre-paid envelope. The basis of settlement shall be as provided for in subparagraph (iv) of paragraph (a) of subdivision (2) of this section (B), above.

c. Termination due to Force Majeure

- i. For purposes of this Contract, a force majeure event is an act or event beyond the control and without any fault or negligence of the Contractor (“Force Majeure Event”). Force Majeure Events may include, but are not limited to, fire, flood, earthquake, storm or other natural disaster, civil commotion, war, terrorism, riot, and labor disputes not brought about by any act or omission of the Contractor.
- ii. In the event the Contractor cannot comply with the terms of the Contract (including any failure by the Contractor to make progress in the performance of the services) because of a Force Majeure Event, then the Contractor may ask the Commissioner to excuse the nonperformance and/or terminate the Contract. If the Commissioner, in his or her reasonable discretion, determines that the Contractor cannot comply with the terms of the Contract because of a Force Majeure Event, then the Commissioner shall excuse the nonperformance and may terminate the Contract. Such a termination shall be deemed to be without cause.
- iii. If the City terminates the Contract due to a Force Majeure Event, the basis of settlement shall be as provided for in subparagraph (iv) of paragraph (a) of subdivision (2) of this section (B), above.

d. Termination due to Reductions in Federal Funding

- i. This Contract is funded in whole or in part by funds secured from the Federal government. Should the Federal government reduce or discontinue such funds, the City shall have, in its sole discretion, the right to terminate this Contract in whole or in part, or to reduce the funding and/or level of services of this Contract caused by such action by the Federal government, including, in the case of the reduction option, but not limited to, the reduction or elimination of programs, services or service components; the reduction or elimination of contract-reimbursable staff or staff-hours, and corresponding reductions in the budget of this Contract and in the total amount payable under this Contract. Any reduction in funds pursuant to this

paragraph shall be accompanied by an appropriate reduction in the services performed under this Contract.

- ii. In the case of the reduction option referred to in subparagraph (i), above, any such reduction shall be effective as of the date set forth in a written notice thereof to the Contractor, which shall be not less than 30 calendar days from the date of such notice. Prior to sending such notice of reduction, the City shall advise the Contractor that such option is being exercised and afford the Contractor an opportunity to make within seven calendar days any suggestion(s) it may have as to which program(s), service(s), service component(s), staff or staff-hours might be reduced or eliminated, provided, however, that the City shall not be bound to utilize any of the Contractor's suggestions and that the City shall have sole discretion as to how to effectuate the reductions.
- iii. If the City reduces funding pursuant to this paragraph (c), the basis of settlement shall be as provided for in subparagraph (iv) of paragraph (a) of subdivision (2) of this section (B), above.

C. Standard Provisions. The Contractor shall comply with, include in its subcontracts, and cause its subcontractors to comply with the following provisions, as applicable:

- (1) *Reporting.* Contractor shall be required to produce and deliver such reports relating to the services performed under the Contract as may be required by the Awarding Entity, City or any other State or Federal governmental agency with jurisdiction.
- (2) *Non-Discrimination.* Contractor shall not violate any Federal, State, or City law prohibiting discrimination concerning employment, the provision of services, and, if applicable, housing, funded by this Contract.
- (3) *Environmental Protection.* If the Contract is in excess of \$150,000, the Contractor shall comply with all applicable standards, orders, or regulations issued under the Clean Air Act (42 U.S.C. § 7401-7671q), Federal Water Pollution control Act (33 U.S.C. §§ 1251-1387) Section 508 of the Clean Water Act (33 U.S.C. § 1368), Executive Order 11738, and Environmental Protection Agency regulations (provisions of 40 CFR Part 50 and 2 CFR Part 1532 related to the Clean Air Act and Clean Water Act). Violations must be reported to the Federal Agency and the Regional Office of the Environmental Protection Agency (EPA). The Contractor shall include this provision in all subcontracts.
- (4) *Energy Efficiency.* The Contractor shall comply with mandatory standards and policies relating to energy efficiency that are contained in the New York State energy conservation plan issued in compliance with the Energy Policy Conservation Act (Pub. L. 94-163).
- (5) *Debarment.* The Contractor certifies that neither it nor its principals is currently in a state of debarment, suspension, or other ineligible status as a result of prior performance, failure, fraud, or violation of City laws. The Contractor further certifies that neither it nor

its principals is debarred, suspended, otherwise excluded from or ineligible for participation in Federal assistance programs. The City reserves the right to terminate this Contract if knowledge of debarment, suspension or other ineligibility has been withheld by the Contractor.

- (6) *Lobbying.* The Contractor certifies, to the best of its knowledge and belief, that:
- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
 - (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," (which is available on the HUD website or here: <https://www.hudexchange.info/resources/documents/HUD-Form-Sflll.pdf>) in accordance with its instructions; and
 - (c) It will require that the language of this Section (C)(6) be included in the award documents for all subcontracts at all tiers.
 - (d) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- (7) *Solid Waste Disposal Act.* Pursuant to 2 CFR § 200.322, Contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (codified at 42 USC § 6962). The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$ 10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$ 10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- (8) *Documentation of Costs.* All costs shall be supported by properly executed payrolls, time records, invoices, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts,

vouchers, orders or other accounting documents, pertaining in whole or in part to the Agreement, shall be clearly identified and regularly accessible.

- (9) *Records Retention.* The Contractor shall retain all books, documents, papers, and records relating to the services performed under the Contract for three years after final payment under the Contract is made and all other pending matters are closed.
- (10) *Records Access.* The Contractor shall grant access to the City, State or any other pass-through entity, the Federal Agency, Inspectors General, and/or the Comptroller General of the United States, or any of their duly authorized representatives, to any books, documents, papers, and/or records of the Contractor that are pertinent to the Contract for the purpose of making audits, examinations, excerpts, and transcripts. The right also includes timely and reasonable access to the Contractor's personnel for the purpose of interview and discussion related to such documents. The rights of access in this section are not limited to the required retention period but last as long as the records are retained.
- (11) *Small Firms, M/WBE Firms, and Labor Surplus Area Firms.* Contractor shall take the following affirmative steps in the letting of subcontracts, if subcontracts are to be let, in order to ensure that minority firms, women's business enterprises, and labor surplus area firms are used when possible:
- a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
 - e. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.
- (12) *Intangible Property.*
- a. Pursuant to 2 CFR § 200.315(d), the Government reserves a royalty-free, non-exclusive, and irrevocable right to obtain, reproduce, publish, or otherwise use, and to authorize others to use, for Government purposes: (a) the copyright in any work developed under the Contract or subcontract; and (b) any rights of copyright to which a Contractor purchases ownership with grant support.

- b. Any reports, documents, data, photographs, deliverables, and/or other materials produced pursuant to the Contract (“Copyrightable Materials”), and any and all drafts and/or other preliminary materials in any format related to such items produced pursuant to the contract, shall upon their creation become the exclusive property of the City. The Copyrightable Materials shall be considered “work-made-for-hire” within the meaning and purview of Section 101 of the United States Copyright Act, 17 U.S.C. § 101, and the City shall be the copyright owner thereof and of all aspects, elements and components thereof in which copyright protection might exist. To the extent that the Copyrightable Materials do not qualify as “work-made-for-hire,” the Contractor hereby irrevocably transfers, assigns and conveys exclusive copyright ownership in and to the Copyrightable Materials to the City, free and clear of any liens, claims, or other encumbrances. The Contractor shall retain no copyright or intellectual property interest in the Copyrightable Materials. The Copyrightable Materials shall be used by the Contractor for no purpose other than in the performance of this Contract without the prior written permission of the City. The City may grant the Contractor a license to use the Copyrightable Materials on such terms as determined by the City and set forth in the license.
- c. The Contractor acknowledges that the City may, in its sole discretion, register copyright in the Copyrightable Materials with the United States Copyright Office or any other government agency authorized to grant copyright registrations. The Contractor shall fully cooperate in this effort, and agrees to provide any and all documentation necessary to accomplish this.
- d. The Contractor represents and warrants that the Copyrightable Materials: (i) are wholly original material not published elsewhere (except for material that is in the public domain); (ii) do not violate any copyright law; (iii) do not constitute defamation or invasion of the right of privacy or publicity; and (iv) are not an infringement, of any kind, of the rights of any third party. To the extent that the Copyrightable Materials incorporate any non-original material, the Contractor has obtained all necessary permissions and clearances, in writing, for the use of such non-original material under this Contract, copies of which shall be provided to the City upon execution of this Contract.
- e. The Contractor shall promptly and fully report to the City any discovery or invention arising out of or developed in the course of performance of this Contract and the Contractor shall promptly and fully report to the Government to make a determination as to whether patent protection on such invention shall be sought and how the rights in the invention or discovery,

including rights under any patent issued thereon, shall be disposed of and administered in order to protect the public interest.

- f. If the Contractor publishes a work dealing with any aspect of performance under this Agreement, or with the results of such performance, the City shall have a royalty-free, non-exclusive irrevocable license to reproduce, publish, or otherwise use such work for City governmental purposes.

D. Special Provisions for Construction Contracts. If this Contract involves Construction work, design for Construction, or Construction services, all such work or services performed by the Contractor and its subcontractors shall be subject to the following requirements in addition to those set forth above in paragraphs (A), (B), and (C):

(1) *Federal Labor Standards.* The Contractor will comply with the following:

- a. The Davis-Bacon Act (40 U.S.C. §§ 3141-3148): If required by the federal program legislation, in Construction contracts involving an excess of \$2000, and subject to any other federal program limitations, all laborers and mechanics must be paid at a rate not less than those determined by the Secretary of Labor to be prevailing for the City, which rates are to be provided by the City. These wage rates are a federally mandated minimum only, and will be superseded by any State or City requirement mandating higher wage rates. The Contractor also agrees to comply with Department of Labor Regulations pursuant to the Davis-Bacon Act found in 29 CFR Parts 1, 3, 5 and 7 which enforce statutory labor standards provisions.
- b. If required by the federal program legislation and subject to any other federal program limitations, Sections 103 and 107 of the Contract Work Hours and Safe Standards Act (40 U.S.C. §§ 3701-3708), which provides that no laborer or mechanic shall be required or permitted to work more than eight hours in a calendar day or in excess of forty hours in any workweek, unless such laborer or mechanic is paid at an overtime rate of 1½ times his/her basic rate of pay for all hours worked in excess of these limits, under any Construction contract costing in excess of \$2000. In the event of a violation of this provision, the Contractor shall not only be liable to any affected employee for his/her unpaid wages, but shall be additionally liable to the United States for liquidated damages.
- c. The Copeland “Anti-Kickback” Act (18 U.S.C. § 874), as supplemented by the regulations contained in 29 CFR Part 3, requiring that all laborers and mechanics shall be paid unconditionally and not less often than once a week, and prohibiting all but “permissible” salary deductions.

- d. If this Contract involves Construction work, design for Construction, or Construction services, a more complete detailed statement of Federal Labor Standards annexed hereto as FEDERAL EXHIBIT 2.

(2) *Equal Employment Opportunity*. Executive Order 11246, as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR chapter 60) for Construction contracts or subcontracts in excess of \$10,000. The Contractor shall include the notice found at FEDERAL EXHIBIT I in all Construction subcontracts. For the purposes of the Equal Opportunity Construction Contract Specifications and Clause below, the term “Construction Work” means the construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction .

Standard Federal Equal Employment Opportunity Construction Contract Specifications for Contracts and Subcontracts in Excess of \$10,000.

1. As used in these specifications:
 - a. “Covered area” means the geographical area described in the solicitation from which this Contract resulted;
 - b. “Director” means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. “Employer identification number” means the Federal Social Security number used on the Employer’s Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. “Minority” includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any Construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this Contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area

(including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this Contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each Construction trade in which it has employees in the covered area. Covered Construction Contractors performing Construction Work in geographical areas where they do not have a Federal or federally assisted Construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each Construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to

community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where Construction Work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of Construction Work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above,

describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female Construction contractors and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the Program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246 or suspended or is otherwise excluded from or ineligible for participation in federal assistance programs.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, Construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for hiring of local or other areas residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

- (3) **Equal Opportunity Clause** (for contracts for Construction Work) required by 41 CFR § 60-1.4(b).

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering

agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

E. Rights to Inventions. [Special Provisions For Contracts Involving Experimental, Developmental, or Research Work.]

(1) If this Contract involves the performance of experimental, developmental, or research work by the Contractor or its subcontractors, and the entity performing such work is a Nonprofit Organization or Small Business Firm as defined below, the following provisions apply in addition to those set forth above in paragraphs (A), (B), and (C), unless the Contract specifically states that this provision is superseded:

a. Definitions. The following definitions apply to this section (D).

- i. "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. § 2321 *et seq.*).
- ii. "Subject invention" means any invention of the Contractor conceived or first actually reduced to practice in the performance of work under this Contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of Contract performance.
- iii. "Practical Application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or government regulations, available to the public on reasonable terms.
- iv. "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- v. "Small Business Firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business

concerns involved in government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

- vi. “Nonprofit Organization” means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c) and exempt from taxation under section 501(a) of the Internal Revenue Code (25 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- b. *Allocation of Principal Rights.* The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.
 - c. *Invention Disclosure, Election of Title and Filing of Patent Application by Contractor.*
 - i. The Contractor will disclose each subject invention to the City and the Federal Agency within two months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. Such disclosure shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after such disclosure, the Contractor will promptly notify the City and the Federal Agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor.
 - ii. The Contractor will elect in writing whether or not to retain title to any such invention by notifying the City and the Federal Agency within two years of disclosure to the City and the Federal Agency. However, in any case

where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the Federal Agency to a date that is no more than 60 days prior to the end of the statutory period.

- iii. The Contractor will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
- iv. Requests for extension of the time for disclosure, election, and filing under subparagraphs (1), (2), and (3) may be granted at the discretion of the Federal Agency.

d. Conditions When the Government May Obtain Title

The Contractor will convey to the Federal Agency, upon written request, title to any subject invention --

- i. If the Contractor fails to disclose or elect title to the subject invention within the times specified in (c), above, or elects not to retain title; provided that the Federal Agency may only request title within 60 calendar days after learning of the failure of the Contractor to disclose or elect within the specified times.
- ii. In those countries in which the Contractor fails to file patent applications within the times specified in (c) above; provided, however, that if the Contractor has filed a patent application in a country after the times specified in (c) above, but prior to its receipt of the written request of the Federal Agency, the Contractor shall continue to retain title in that country.
- iii. In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

- e. Minimum Rights to Contractor and Protection of the Contractor Right to File
 - i. The Contractor will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in (c), above. The Contractor's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the Contract was awarded. The license is transferable only with the approval of the Federal Agency except when transferred to the successor of that party of the Contractor's business to which the invention pertains.
 - ii. The Contractor's domestic license may be revoked or modified by the funding Federal Agency to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and agency licensing regulations (if any). This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the funding Federal Agency to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
 - iii. Before revocation or modification of the license, the funding Federal Agency will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed thirty calendar days (or such other time as may be authorized by the funding Federal Agency for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and Federal Agency regulations (if any) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.
- f. Contractor Action to Protect the Government's Interest

- i. The Contractor agrees to execute or to have executed and promptly deliver to the Federal Agency all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and (ii) convey title to the Federal Agency when requested under paragraph (d) above and to enable the Government to obtain patent protection throughout the world in that subject invention.
- ii. The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c), above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by (c)(1), above. The Contractor shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
- iii. The Contractor will notify the Federal Agency of any decisions not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty calendar days before the expiration of the response period required by the relevant patent office.
- iv. The Contractor agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the contract) awarded by (identify the Federal Agency). The government has certain rights in the invention."

g. Subcontracts

- i. The Contractor will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental or research work to be performed by a small business firm or domestic nonprofit organization. The subcontractor

will retain all rights provided for the Contractor in this clause, and the Contractor will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

- ii. The Contractor will include in all other subcontracts, regardless of tier, for experimental developmental or research work the patent rights clause required by 2 CFR § 200.315(c) and Appendix II to 2 CFR Part 200.
- h. *Reporting on Utilization of Subject Inventions.* The Contractor agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as the Federal Agency may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by the Federal Agency in connection with any march-in proceeding undertaken by the Federal Agency in accordance with paragraph (j) of this clause. As required by 35 U.S.C. § 202(c)(5), the Federal Agency agrees it will not disclose such information to persons outside the Government without permission of the Contractor.
- i. *Preference for United States Industry.* Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject inventions in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the Federal Agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.
- j. *March-in Rights.* The Contractor agrees that with respect to any subject invention in which it has acquired title, the Federal Agency has the right in accordance with the procedures in 37 CFR § 401.6 and any supplemental regulations of the Federal Agency to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Contractor, assignee, or exclusive licensee refuses such a request the Federal Agency has the right

to grant such a license itself if the Federal Agency determines that:

- i. Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use.
- ii. Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee or their licensees;
- iii. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee or licensees; or
- iv. Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

k. *Special Provisions for Contracts with Nonprofit Organizations.*

If the Contractor is a nonprofit organization, it agrees that:

- i. Rights to a subject invention in the United States may not be assigned without the approval of the Federal Agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Contractor;
- ii. The Contractor will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when the Federal Agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. § 202(e) and 37 CFR § 401.10;
- iii. The balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education; and
- iv. It will make efforts that are reasonable under the circumstances to attract licensees of subject invention that are Small Business Firms and that it will give a

preference to a Small Business Firm when licensing a subject invention if the Contractor determines that the Small Business Firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not Small Business Firms; provided, that the Contractor is also satisfied that the Small Business Firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary may review the Contractor's licensing program and decisions regarding Small Business Firm applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary when the Secretary's review discloses that the Contractor could take reasonable steps to implement more effectively the requirements of this paragraph (k)(iv).

1. *Communication.* The central point of contact at the Federal Agency for communications on matters relating to this clause may be obtained from the City upon request.

FEDERAL EXHIBIT 1

NOTICE TO BIDDERS

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246, as amended) FOR ALL CONSTRUCTION CONTRACTS AND SUB-CONTRACTS IN EXCESS OF \$10,000.

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all Construction Work in the covered area, are as follows:

Goals and Timetables for Minorities

<u>Trade</u>	<u>Goal</u> <u>(percent)</u>
Electricians	9.0 to 10.2
Carpenters	27.6 to 32.0
Steamfitters	12.2 to 13.5
Metal Lathers	24.6 to 25.6
Painters	28.6 to 26.0
Operating Engineers	25.6 to 26.0
Plumbers	12.0 to 14.5
Iron Workers (structural)	25.9 to 32.0
Elevator Constructors	5.5 to 6.5
Bricklayers	13.4 to 15.5
Asbestos Workers	22.8 to 28.0
Roofers	6.3 to 7.5
Iron Workers (ornamental)	22.4 to 23.0
Cement Masons	23.0 to 27.0
Glazers	16.0 to 20.0
Plasterers	15.8 to 18.0
Teamsters	22.0 to 22.5
Boilermakers	13.0 to 15.5
All Other	16.4 to 17.5

Goals and Timetables for Women

From April 1, 1980 until the present 6.9

These goals are applicable to all the Contractor's Construction Work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs Construction Work in a geographical area located outside of the covered area, it shall apply the goals established for such

geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved Construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any Construction subcontract in excess of \$10,000 at any tier for Construction Work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Contract, the "covered area" is the City of New York.

FEDERAL EXHIBIT 2

[Insert Exhibit 2 for applicable federal grant program]

(NO TEXT THIS PAGE)

**FEDERAL EMERGENCY MANAGEMENT AGENCY (“FEMA”) RIDER
(10/27/2015)**

**For use with contracts funded by the FEMA Grant and Cooperative Agreement Programs,
including the Public Assistance Program**

(This Rider should not be used with contracts funded by the following FEMA Programs: Emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. This Rider should be accompanied by the Uniform Federal Contract Provisions Rider for Federally Funded Procurement Contracts.)

1. Suspension and Debarment. Section C(5) of the Uniform Federal Contract Provisions Rider for Federally Funded Procurement Contracts is supplemented with the following provisions:
 - (a) This contract is a covered transaction for purposes of 2 C.F.R. Parts 180 and 3000. As such the Contractor is required to verify that none of the Contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935). By entering into this contract, the Contractor certifies that it is in compliance with 2 C.F.R. Parts 180 and 3000.
 - (b) The Contractor must comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C during the term of this contract and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
 - (c) The certification in paragraph (a), above, and section C(5) of the Uniform Federal Contract Provisions Rider for Federally Funded Procurement Contracts is a material representation of fact relied upon by the City of New York. If it is later determined that the Contractor did not comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C, in addition to remedies available to the City of New York and, if applicable, the State of New York, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
2. Davis-Bacon Act. For the purposes of Section D(1)(a) of the Uniform Federal Contract Provisions Rider, compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3148) is not required of the Contractor pursuant to FEMA regulations. However, if this Contract is funded by another federal funding source (e.g., the U.S. Department of Housing and Urban Development CDBG or CDBG-DR programs), compliance with the Davis-Bacon Act is required to the extent required by law and as set forth in the contract documents.
3. Rights to Inventions Made Under a Contract or Agreement. Section E of the Uniform Federal Contract Provisions Rider for Federally Funded Procurement Contracts does not

apply to the following FEMA Programs: Public Assistance Program, Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program.

4. Copeland “Anti-Kickback” Act. The Contractor shall comply with provisions of the Copeland “Anti-Kickback” Act (18 U.S.C. § 874) as delineated in the Uniform Federal Contract Provisions Rider, FEMA Exhibit 2, Section (A).
5. Contract Work Hours and Safety Standards Act. The Contractor shall comply with the provisions of the Contract Work Hours and Safety Standards Act as delineated in the Uniform Federal Contract Provisions Rider, FEMA Exhibit 2, Section (B).
6. Access to Records.
 - (a) The Contractor agrees to provide the City of New York, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
 - (b) The Contractor agrees to permit any of the foregoing parties to reproduce said documents by any means or to copy excerpts and transcriptions as reasonably needed.
 - (c) The Contractor agrees to provide the FEMA Administrator or his/her authorized representative access to construction or other work sites pertaining to the work being completed under the contract.
7. Logos. The Contractor shall not use DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.
8. Compliance with Law. The Contractor acknowledges that FEMA financial assistance will be used to fund the contract only and agrees to comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.
9. Federal Government not a Party. The Contractor acknowledges and understands that the Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the City, Contractor or any other party pertaining to any matter resulting from the contract.
10. False Claims. The Contractor acknowledges that 31 U.S.C. Chap. 38 applies to the Contractor’s actions pertaining to this contract.

EXHIBIT 2
Federal Labor Standards Provisions (Non-Davis Bacon)¹
Federal Emergency Management Agency
(10/27/2015)

Applicability: The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. Compliance with the Copeland “Anti-Kickback” Act.

1. **Contractor.** The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
2. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clause in paragraph 1 above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
3. **Breach.** A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

B. Compliance with the Contract Work Hours and Safety Standards Act. The provisions of this Section B are applicable where the amount of the prime contract exceeds \$100,000.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1) of this Section B the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In

¹ This version of Exhibit 2 applies to contracts funded by FEMA Grant and Cooperative Agreement Programs, including the Public Assistance Program. Do not use this version of Exhibit 2 in connection with FEMA programs that are subject to the Davis-Bacon Act; such programs are the Emergency Management Preparedness Grant Program, the Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program.

addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

3. **Withholding for unpaid wages and liquidated damages.** The City of New York shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this Section B and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section B.

C. **Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

1. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.
2. The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.
3. The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as FEMA or the Secretary of Labor shall direct as a means of enforcing such provisions.

NOTICE

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated August 8, 2022), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised August 2018), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) and the Standard Highway Specifications of the Department of Transportation (dated May 16, 2022) of The City of New York, shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

(NO TEXT ON THIS PAGE)

A. NOTICE TO BIDDERS

NO TEXT

B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS

- (1) **Refer** to **Subsection 10.15 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances**, Page 19:

Add the following to **Subsection 10.15**:

- (1) CONSOLIDATED EDISON COMPANY OF NEW YORK (CON EDISON)

There are CON EDISON facilities in the area of construction. The Contractor shall notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Dimitrios Karounis at (718) 275-4085.

- (2) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor shall notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. at (718) 963-5612.

- (3) VERIZON

There are VERIZON facilities in the area of construction. The Contractor shall notify VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Mr. David Reid at (718) 977-8138.

- (4) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. Mark Larm at (917) 335-9181.

- (2) **Refer** to **Subsection 10.21 - Contractor To Notify City Departments**, Page 21:

Add the following to **Subsection 10.21**:

- (1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Ms. Sol Posada, P.E., Chief, Linear Capital Program Management Division at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at (718) 595-4347 at least thirty (30) days prior to the start of construction.

- (2) NEW YORK CITY FIRE DEPARTMENT

The Contractor shall notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 624-4194 or (718) 624-3752.

- (3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Michael Lofesse- Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3799/ (212) 839-3359, at least seventy-two (72) hours prior to the start of construction.

- (4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Jason Conheeney at (718) 965-7740.

(5) N.Y.C. TRANSIT AUTHORITY

The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements.

Arrangements shall be made through:

Ms. Sarah Wyss
 Director Of Short Range, Bus Service Planning (SRB)
 New York City Transit
 2 Broadway, 17th Floor
 New York, N.Y. 10004
 Telephone No. (646) 252-5517
 sarah.wyss@nyct.com

(3) **Refer** to **Subsection 10.24 – Damaged Water Service Pipes To Be Repaired By A Licensed Plumber**, Page 22:

Add the following to **Subsection 10.24**:

If the damaged or cut water service pipe is lead, galvanized steel, or galvanized iron, the service pipe must not be partially replaced, but fully replaced from the main to the house control valve. If the service pipe was damaged, cut, or otherwise interrupted due to the Contractor's actions or means & methods (including selection of shoring systems), the water service pipe will be replaced at the Contractor's own cost.

(4) **Refer** to **Subsection 10.30 - Contractor To Provide For Traffic**, Page 24:

Add the following to **Subsection 10.30**:

(1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. HBPED800Q.

(5) **Refer** to **Subsection 40.02.15 - Disposal Of Water From Trenches**, Page 184:

Add the following to **Subsection 40.02.15**:

(A) The Department of Design and Construction has **not** filed application for Dewatering Permit with the New York State Department of Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 15 of Article 15, for a Temporary Well Point System Permit. However, it is anticipated that the criteria for rate of pumping specified herebefore in this section will be exceeded in areas of construction; the Contractor shall be responsible for applying and obtaining the necessary dewatering permit prior to the dewatering of trenches within the scope of this project.

As part of the permit application the Contractor will be required to comply with all the requirements of **Section 40.16** of this section.

Copies of all materials submitted to NYSDEC shall be sent to the New York City Department of Design and Construction (NYCDDC), Infrastructure/Design.

The following minimum requirements set forth by the New York Department of Environmental Conservation shall be complied with prior to the start of work in areas of construction requiring dewatering permit:

- (1) An analysis must be made of water samples taken. The results are to be submitted to the Regional Permit Administrator. An analysis shall be made for BOD, salinity, oil, and grease. The samples shall be analyzed by a laboratory certified by the New York State

Health Department and the results are to be submitted directed to the New York State Department of Environmental Conservation by the laboratory.

- (2) Prior to setting any wells, wellpoints or header pipes, the Contractor shall submit to the NYSDEC a layout of the complete dewatering system including the location of the discharge point. When permitted by the NYSDEC, discharge of groundwater on the beach areas shall be done in such a manner as to eliminate any erosion or siltation and will require the installation of splash blocks and/or settling basins.

The Contractor is advised that all work required in obtaining a permit, must be submitted to, and approved by the NYSDEC prior to the commencement of any work in areas of construction requiring dewatering permit. No payment for any item of work will be made, and no shop drawing shall be approved for the areas of construction until such time that a written approval is obtained from the NYSDEC.

(B) The Contractor is advised that all work shall be governed by the provisions and requirements of the obtained permit, and their said provisions and requirements shall be made a part of the contract and the Contractor shall be responsible for strict adherence thereto.

The cost of all work required for applying, complying and obtaining required dewatering permits including the cost for any required updating of permits shall be deemed included in the prices bid for all item of this contract. No additional or separate payment will be made for any work required in order to comply with these requirements.

- (6) **Refer** to Page 220:
Add the following new **Section 40.16**:

SECTION 40.16 DEWATERING PERMITS

40.16.1 DESCRIPTION

Under this contract, and at locations where groundwater will be present in the trenches and excavations, the Contractor is required to install, maintain and operate a temporary dewatering system of sufficient size and capacity to control ground and surface water flow into the excavation and to allow all work to be accomplished in the "dry condition".

The Contractor shall be required to obtain the following permits in order to operate a temporary dewatering system.

- (A) A Dewatering/Discharge Permit from the New York City Department of Environmental Protection (NYCDEP);
- (B) A Long Island Well Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 15 of Article 15, implemented by 6NYCRR Part 601 - Water Supply and Part 602 - Long Island Well. This permit is required only in the Boroughs of Brooklyn and Queens to withdraw water using a well point or deep well system where the total capacity of such well or wells is in excess of 45-gallons per minute (or 64,800-gallons per day); and,
- (C) An Industrial State Pollutant Discharge Elimination System (SPDES) or a Non-Jurisdictional Determination Letter in compliance with Title 8 and 7 of Article 17 of the Environmental Conservation Law of New York State, respectively.

The Contractor is advised that the provisions and requirements of the aforementioned permits shall govern all work, and the said provisions and requirements are hereby made a part of the sewer contract and the Contractor shall be responsible for strict adherence thereto.

No dewatering work shall commence until the above-mentioned Permits have been obtained for this project.

The Contractor is advised that in order to comply with all the permits requirements, the Contractor will be required to submit maps, test data, etc. prior to the start of work. In order to expedite the processing of the permit and its requirements, the Contractor shall be required to obtain the services of an independent Environmental Scientist as herein described below in **SubSection 40.16.2** to perform this work and act as liaison with NYSDEC and NYCDEP.

40.16.2 QUALIFICATIONS

The Environmental Scientist utilized to perform the work required under this section must have adequate experience in work of this nature (obtaining Long Island Well Permit/Dewatering Permit) and must have previous experience in working with the NYSDEC and the NYCDEP, designing equivalent dewatering systems, and have successfully obtained the type of permits required under this contract. Prior to the start of work, the Contractor will be required to submit the name and resume of the Environmental Scientist for approval.

40.16.3 NYSDEC DEWATERING PERMITS

The dewatering system shall be designed by the Environmental Scientist using accepted and professional methods of design and engineering consistent with the best modern practices.

The material to be submitted shall include, but not be limited to the following:

- (1) Site Plan - Scaled, showing construction activity (e.g. excavation, pathway of the pipe, new outfalls, etc.) locations of well points, header pipes and pumps, and all staging and storage areas.

Also included herein shall be a layout of the complete dewatering system including the location of the discharge point. When permitted by the NYSDEC, discharge of groundwater on beach areas shall be done in such a manner as to prevent any erosion or siltation and will require the design and installation of splash blocks and/or settling basins.

- (2) Dewatering System Specifications:

- | | |
|-------------------------------|-----------------------------|
| (a) Number of Well Points | (h) Total Volume Pumped |
| (b) Diameter of Well Points | (i) Number of Pumps |
| (c) Spacing of Well Points | (j) Capacity of Pumps |
| (d) Length to Screen | (k) Duration of Pumping |
| (e) Depth to Bottom of Screen | (l) Initial and Average GPM |
| (f) Static Water Level | (m) Estimated Daily Pumpage |
| (g) Drawdown Required | (n) Flow Meter |

- (3) Cross Section - Scaled, showing well points, riser, header, annular material (if used) and other equipment associated with each point. A typical construction style drawing may be utilized. Should the Contractor be permitted to use a deep well system, all information regarding it must be submitted.

- (4) Drawdown Contour Map - Based upon a review of the surrounding area affected by the dewatering and upon boring within the project area and characteristics of the soils, the depth and pumping rate of dewatering system and the duration of the pumping, the Environmental Scientist shall submit both a narrative and diagram showing the anticipated maximum cone of depression which shall be shown from both above and in cross section on scaled diagrams. Contour lines on diagrams shall be labeled to show depth from land surface.

- (5) Description of Site and Adjacent Areas - A short narrative shall be prepared describing the land use in the area paying attention to any potential sources of groundwater contamination that may migrate into the well's cone of depression, such as gas stations, chemical plants, wrecking yards, sanitary landfills, etc. Latest map of the area shall be included in the narrative.

- (6) Groundwater Analysis - The Environmental Scientist shall develop and submit a sampling and analysis program subject to NYSDEC Approval (a minimum of one groundwater sample from a site well shall be collected and analyzed). A laboratory certified by the New York State Health Department shall analyze the samples. The sampling and analysis program must include but is not limited to the following:

NYSDEC REGION 2 - DEWATERING PROJECTS SAMPLING INFORMATION

NO.	PARAMETERS	TYPE	EPA METHOD	DETECTION
1	pH	Grab	150.1	EPA min
2	Temperature	°F	After Pumping	EPA min
3	Fecal Coliform	Grab	5-Tubes/3-Dilutions	2-MPN/100-ml
4	Oil & Grease	Grab	413.1	EPA min
5	BOD5	Grab	405.1	EPA min
6	Total Suspended Solids	Grab	160.2	EPA min
7	Settleable Solids	Grab	160.5	EPA min
8	Chlorides	Grab	325.1-325.3	EPA min
9	Benzene	Grab	602	EPA min
10	Toluene	Grab	602	EPA min
11	Xylenes	Grab	602	EPA min
12	Ethylbenzene	Grab	602	EPA min
13	PCB's	Grab	608	(See Note 1)
14	Pesticides	Grab	608	EPA min
15	13 Priority Metals	Grab	200 series	EPA min
16	Acids Base/Neutrals	Grab	625-GC/MS	EPA min
17	Halogenated Volatiles	Grab	601-GC	EPA min
18	Nitrate/Nitrite	Grab	300 or 353.3	EPA min
19	Aromatic Volatiles	Grab	602-GC	EPA min
20	Cyanide (total or amenable)	Grab	335.1/335.2	EPA min

NOTE:

- (1) List each individual aroclor found and report the concentration of each aroclor tested. Use the N.Y.S. detection limit, which is 0.065-µg/l.

Small dewatering projects with a total estimated pumped volume up to 15-Million Gallons (MG) require sampling analysis for parameters No.'s 1 through 12.

Medium dewatering projects with a total estimated pumped volume between 15-MG and 60-MG require sampling analysis for parameters No.'s 1 through 14.

Large dewatering projects with a total estimated pumped volume greater than 60-MG require sampling analysis for parameters No.'s 1 through 20.

Samples are to be collected after development of the well by a licensed well driller.

A laboratory certified by the NYS Department of Health must conduct all testing.

Irrespective of the aforementioned sampling requirements based on total estimated pumped volumes, the Department may require sampling of additional parameters if the proposed dewatering site is suspected of being contaminated.

40.16.4 SUBMISSION OF DEWATERING PLAN

The Environmental Scientist will be required to submit two (2) copies of the Dewatering Plan (together with all reports, materials, designs, drawings, maps and plans) to the Infrastructure Engineering Support Unit for review and approval. Once approved the Environmental Scientist shall submit in triplicate the Final Dewatering Plan to both the NYSDEC and the NYCDEP. The Dewatering Plan should be bound and bear the name of the Contractor, NYSDEC Application Number and the Signature of the preparer. All drawings and maps shall be on sheets 27-inches by 40-inches and to scale not less than 1"=30'.

40.16.5 DAMAGES

The Contractor shall be responsible for and shall repair at no cost to the City any damage caused by inadequate or improper design and operation of the dewatering system, and any mechanical or electrical failure of the dewatering system.

40.16.6 SYSTEM REMOVAL

The Contractor shall remove all dewatering equipment and temporary electrical service from the site. All wells shall be removed or cut off a minimum of three (3) feet below the final ground surface and capped. Holes left from pulling wells or wells that are capped shall be grouted in a manner approved by the Engineer.

40.16.7 PAYMENTS

No additional or separate payment will be made for any work described herein. The costs for all labor, materials, equipment, permit fees, samples, tests, reports, services and insurance required or necessary to perform all the work described herein shall be deemed included in the price bid for all items of work.

(7) **Refer** to Page 417:

Add the following new **Section 60.41PSL**:

**SECTION 60.41PSL
SPECIFICATION FOR PIPE REHABILITATION USING THE PRIMUS LINE**

60.41PSL.1 DESCRIPTION

This work consists of TV inspection, cleaning and lining the existing 20-inch cast iron water main with the Primus Line® rehabilitation system; all in accordance with this specification, the Contract Drawings, manufacturer's instructions and any other regulatory requirements.

60.41PSL.2 SUMMARY

60.41.2.1. Primus Line® is a trenchless technology for the rehabilitation of pressure pipelines for different media such as water, gas, and oil. The process is based on a flexible high-pressure hose, which is specifically developed for the connection technique of the system.

60.41.2.2 The system consists of one flexible high-pressure hose. The inner layer of the hose can be selected for specific media. The outer layer – regardless of media – is made of wear-resistant PE. Seamless Kevlar aramid fabric is between the inner and outer layers, functioning as a static load-bearing layer.

60.41.2.3. A range of diameters are available for different host sizes and mediums, matching product design requirements.

60.41.2.4. The installation process is continuous until the complete length of the existing pipe between access points or manholes has been lined from small construction pits – thus avoiding large roadworks.

60.41.2.5. The liner is inserted at a fixed diameter, leaving annular space between the liner and host pipe wall. The annulus will remain.

60.41PSL.3 REFERENCES

60.41PSL.3.1. PMG -1185

- CSI Division 22 00 00 – Plumbing
- Section 22 11 00 –Facility Water Distribution
 - o 2012 and 2009 IPC
 - o 2012 and 2009 IRC
 - o 2012 and 2009 UPC
 - o ICC-ES LC1034-2013

60.41PSL.3.2. NSF/ANSI 61 Section 5

- Material for use in contact with drinking water Primus Line® Water Low Pressure System
- DN150-LP DN250-LP
- SD150-LP DN300-LP
- DN200-LP DN-400-LP

60.41PSL.4 MATERIALS

60.41PLS.4.1 The pipe lining system specified herein shall be manufactured and specified by the Rädlinger Primus Line GmbH, Kammerdorfer Str. 16, 93413 Cham, Germany, or approved equal from the following vendor or as approved by the Engineer.

J. Fletcher Creamer & Son, Inc.	Arold Construction Co. Inc.	Spiniello 101 East Broadway
51 Powder Mill Bridge Rd.	354 Eisenhower Pkwy	101 East Broadway
Hackensack, NJ 07601	Kingston, NY 12401	Livingston, NJ 07039
Phone: (201) 488-9800	Office: (845) 336-8753	Phone: (973) 808-8383
Fax: (201) 488-2901	Fax: (845) 336-8245	Fax: (973) 808-9591
www.jfcson.com	www.aroldconstruction.com	www.spiniello.com

- I) Materials for water systems shall meet the appropriate American Water Works Association (AWWA) standards and American National Standards Institute (ANSI) specifications, except as modified by these specifications.
- II) Installation Contractor/bidder must be certified by Rädlinger Primus Line GmbH, or approved equal. The contractor shall submit these certifications along with their bid form to the Engineer. Furthermore, the contractor shall verify references for three similar installations or provide a Primus Line® tech, or approved equal, on site for at least one installation

60.41PSL.4.2 MATERIAL COMPOSITION

- A. The Primus Line® hose has multiple layers and very small wall-thickness. The inner layer of the hose can be selected for specific media. The outer layer – regardless of medium is made of wear-resistant PE. Seamless Kevlar aramid fabric is between the inner and outer layers, functioning as a static load-bearing layer.

- B. Inside coating:
 - Material: polyethylene (PE)
 - Color: black
 - k- value: $1,10 \times 10^{-3}$ inch

 - Woven structure: according to DVGW VP 643
 - Woven fabric (single-layer):
 - Material: Kevlar®

 - Exterior coating: polyethylene (PE)
 - Material: abrasion-resistant polyethylene
 - Color: blue, RAL 5005
 - Abrasion [4]: $< 7,32 \times 10^{-4}$ inch³ according to (DIN53516)

- C. Connectors/Termination points for the primus line system are made of Stainless Steel and Cast for low pressure applications and are comprised of a compression type fitting and are specified by the engineer.

60.41PSL.4.3. MATERIAL AND EQUIPMENT ACCEPTANCE

The Primus Line® hose minimum dimensions shall be in accordance with Table shown on manufacturer Pimus Line Product Portfolio.

60.41PSL.4.4 MATERIAL TESTING

- A Factory test standards meet or exceed all manufacturing industry Standards for pressure pipe.
- B Manufactured date and lot number is stamped on pipe.

60.41PSL.5 METHOD

60.41PSL.5.1 SITE PREPARATION

Small construction pits are required at the beginning and the end of each rehabilitation section. The pipe section to be removed inside the pit has to be at least 1.25 m (approx. 4.1 feet) and up to max. 2.75 m (approx. 9 feet) (required workspace) long. The length varies with the system diameter and the number of connectors to be installed (one connector in each pit at starting and end pits, two connectors in intermediate pits). The pits have to be built in compliance with the generally acknowledged and valid codes of technical practice. It is subject to the mandatory industrial accident prevention codes and regulations of construction associations as well as the local standards and safety codes.

60.41PSL.5.2 PREPARATION OF HOST PIPE

A Camera Inspection of Host Pipe Prior to Cleaning

The entire pipe length has to be inspected prior to cleaning the old pipe and inserting the liner. The camera inspection will be recorded and the recording submitted to the engineer at the end of the project.

At each of the cut-off points, both the inner and outer diameter of the pipe have to be measured and documented. The pipe material must be described and documented. Both camera inspection and recording/ validation will focus on the following points:

- reductions in cross sections caused by incrustations and obstacles protruding into the cross section (sagging weld seam roots, protruding flanges, screws, pins, plugs, fittings or sacrificial anodes).
- sudden changes in cross section (steps)
- direction changes (bends)

Camera inspection results will be taken as the basis of planning how to clean the pipe. Ideally, the project setup includes a camera inspection of the pipe section to be handled already. Apart from inspecting the pipe, the camera will be used to establish a rope connection between the pits.

B Cleaning the Host Pipe

The goal of the rough cleaning is to provide a free inner diameter of the pipe. Therefore high water pressure cleaning techniques are used. Spring steel scrapers and rubber discs have also shown their support in the rough cleaning process. Pigs can also be sufficient to clean non-metal pipes and pipes with a non-metal internal coating (not including subsequent cement mortar coatings). Stationary obstacles (casting defects, sagging weld seam roots, protruding flanges, screws, pins, plugs, fittings or sacrificial anodes, etc.) protruding from the pipe wall will be removed by removing the pipe section containing the obstacle or by using a milling robot equipped with diamond tools. Weld seams have to be machined until they are perfectly uniform and flat all the way around.

C Inserting of the Liner

The liner is folded by the manufacturer and its U-shape is maintained by adhesive tape. The U-shaped and folded liner is spooled onto transport reels (max. outside diameter: 2.5 m (approx. 8.2 feet), drum shaft diameter: 1 m (approx. 3.3 feet) and placed at the starting pit of the section. Depending on the reel weight and length, either unwinding rails or unwinding stations are used to unwind the liner from the reels.

A winch is placed at the destination pit of the pipe section. From there, the rope of the winch is pulled through the pipe to the pit at the starting point. Depending on the liner diameter, the length of liner to be inserted and the bends in the section, either a rope or a pulling head is attached to insert the liner. The rope or pulling head is connected to the rope of the winch.

To prevent the liner from twisting while being inserted, an anti-twist device is installed between the rope (or pulling head) and the rope of the winch. On straight sections, the liner can be inserted with speeds of up to 10 m (approx. 32.8 feet) per minute. When going through bends, the insertion speed is to be reduced to not more than 5 m (approx. 16.4 feet) per minute. Inserting the liner is complete when at least 3 m (approx. 9.8 feet) of tensionless liner after the rope or pulling head come to rest in the destination pit.

D Inflating the Liner by Means of Compressed Air

In order to inflate the liner or to give it its final round shape, sealing balloons are used to close the beginning (pit 1) and end (pit 2) of the liner. One of the sealing balloons features a bypass. Oil-free compressed air has to be blown into the bypass and from there into the liner. At an internal pressure of 0.5 bar (approx. 7.3 psi) or higher, the adhesive tapes (maintaining the U-shape) begin to break. All of the tapes will have opened at a maximum internal liner pressure of 1 bar (approx. 14.5 psi). After inflating the liner, the liner can be cut to a length of 1 m (approx. 3.3 feet) projecting the old pipe in both the starting and destination pits. The 1 m (approx. 3.3 feet) of projecting end of liner is required to install the connectors.

E Installing the Connectors

A two-piece design of connector is used. The liner is mechanically jammed-in between an outer sleeve and a connector core. The outer sleeve is fitted with a flange and is screwed to the flange of the old pipe. The outer sleeve may also be welded to the old pipe if the old pipe is made of weldable steel. After attaching the outer sleeve, the liner is cut directly at the edge of the sleeve. Either a flange or a welding end is attached to the connector core which is inserted in the liner or the outer sleeve. Like this, the adapter (i.e. the link between the rehabilitated section and the adjoining pipe) can be screwed or welded to the connector core. The connectors provide a permanently sealed connection between the rehabilitated pipe section and the adjoining pipe section.

F Pressure or Leak Test

To perform the pressure or leak test, a blind flange is used to close the flange at the connector core. Another option is to use a dished boiler end to close the welding end of the connector core. The connectors need to be safeguarded with reference to the horizontal forces resulting from the test pressure that the sample was exposed to. Any known method of leak-testing metal and non-metal pipes may be used to test the liner.

Water liners and oil liners are tested by using potable water. Gas liners are tested by using compressed air.

60.41PSL. 6 EXECUTIONS

60.41PSL.6.1 INSTALLATION

- A. Basics
- Maximum operating temperature of the Primus Line® Systems is 120 °. F.
- In all operating conditions, the maximum flow rate in the Primus Liner® must not exceed 3 m/s.
- B. The Primus Line System must be installed in accordance to the manufacturer's specification.
- C. The Primus Line system is installed by the Primus Line Company or by a certified Primus Line installer.
- D. The Primus Line system is installed with a pull winch that is not to exceed a pull force of 10 tons
- E. The installed Primus Line system is handed over to the water supply company after a successful tightness test (in accordance to the acknowledged rules of technology for plastic pipes).

- F. The disinfection of the liner (and the connectors) can be done in accordance with the manufacturer's recommendations.

60.41PSL.6.2 FIELD INSPECTION

- A. Post CCTV inspection only permitted by a camera system approved by certified Technicians of Primus Line
- B. Post inspection to be carried out only by Certified Technician
- C. Pressure test to be done in accordance with the Manufactures' specification and compliant with engineers.

60.41PSL.7 MEASUREMENT.

The quantity of Primus Lining to be measured for payment shall be the number of lineal feet of pipe of each size, furnished and incorporated in the work, complete, measured in place along its axis between the inner faces of the structures or pipe connected.

60.41PSL.8 PRICE TO COVER.

The contract price for this item shall be the unit price bid per linear foot of Primus Line lining installed ; preparation of site including construction pits at the beginning & the end of host pipe, excavation (as per Section 40.03 of the NYCDEP Specification), cutting/removal of existing pipe section from each pit, and backfill; preparation of host pipe including cleaning host pipe, inserting as well as inflating of the liner into host pipe, necessary connectors/fittings/adapters needed between the rehabilitated section and the adjoining pipes; testing after liner installation including pressure and leak testing; disinfection using chlorine after liner installation and shall include the cost of all labor, materials, equipment, samples, and insurance required to furnish and install Primus Line lining all in accordance with the contract drawings, the specifications and as directed by the Engineer.

Payment for the Camera Inspection of host pipe will be made under item no. 63.11DR

Item No.	Item	Pay Unit
60.41PSL20	Pipe Rehabilitation using the Primus Line	L.F.

- (7) **Refer** to Page 441:
Add the following new **Section 63.11DR**:

SECTION 63.11DR
TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF WATER MAIN

63.11DR.1 DESCRIPTION

The Contractor must make a closed-circuit television inspection and digital audio-visual recording of 20-inch existing steel watermain before and after completion of the bridge construction prior to the final inspection, from shutoff valve located on the east side of the bridge to the shutoff valve on the west side of the bridge.

63.11DR.2 PURPOSE

The purpose of the specification is to provide the followings:

- (1) Non-destructive Pressure Pipe Analysis and Internal Leak Surveying Services.
- (2) At each of the cut-off points, both the inner and outer diameter of the pipe have to be measured and documented. The pipe material must be described and documented. Both camera inspection and recording/ validation will focus on the following points:
 - reductions in cross sections caused by incrustations and obstacles protruding into the cross section (sagging weld seam roots, protruding flanges, screws, pins, plugs, fittings or sacrificial anodes).
 - sudden changes in cross section (steps)
 - direction changes (bends)

Camera inspection results will be taken as the basis of planning how to clean the pipe. Ideally, the project setup includes a camera inspection of the pipe section to be handled already. Apart from inspecting the pipe, the camera will be used to establish a rope connection between the pits.

63.11DR.3 QUALIFICATION OF CONTRACTOR

The prospective contractor will use tools with an established performance of internal leak detection and non-destructive condition assessment services for five (5) projects or more in the last two (2) years.

63.11DR.4 ESTIMATED QUANTITIES

The quantities listed on the bid schedule are best estimates. Actual services requested can be more or less than the listed quantities during the contract term, depending on anticipated needs.

63.11DR.5 ENGINEER'S APPROVALS

- (A) The Contractor must execute all the provisions of this section in a manner approved by the Engineer.
- (B) All labor, experienced supervision, skilled technicians, mobile television studios, electronic equipment, television cameras, materials and equipment necessary and required to perform the work under this section must be provided in strict accordance with the most current Industry Standards and are subject to final approval by the Engineer.

63.11DR.6 NOTIFICATION

The Contractor must give the Engineer five (5) days' notice prior to commencement of the Contractor's intention to begin the inspection work included under this section.

63.11DR.7 SUPERVISION AND TECHNICIAN

- (1) An experienced supervisor who has adequate experience in the field of watermain pipeline inspection will coordinate the entire inspection operation stated under this section and as approved by the Engineer.
- (2) The skilled technician required herein must have 5 years minimum of experience in the field of watermain pipeline inspection and must perform all work as directed by the Engineer.

63.11DR.8 SCOPE OF WORK**63.11DR.8.1 REQUIREMENTS FOR INTERNAL TETHERED LEAK AND GAS POCKET, LIVE MAIN INSPECTION WITH VIDEO**

This specification covers the requirements for conducting leak assessments within the pipeline. The leak assessment must be performed internally while the pipeline remains in service. A sensor head (tethered device) is inserted into a live pipeline carried by the flow of water. The sensor will travel through the pipeline pinpointing the exact location of leak(s). Leaks are identified by the distinctive acoustic signals generated at the pipe wall. The requirements are the following:

- (1) Perform the inspection in a nondestructive manner, while the pipeline is in service or under pressure of at least 15 psi, using real-time data.
- (2) Be capable of inspecting multiple pipeline material types including Steel, Cast Iron, and Ductile Iron Pipe.
- (3) Be capable of inspecting diameters up to 20-inch diameter pipe.
- (4) Be able to insert system into pipeline without de-pressurizing up to 225 psi.
- (5) Be capable of advancing, halting and retrieving device during time of assessment.
- (6) Be able to detect multiple leaks in one section of pipe during time of assessment.
- (7) Be able to track the device from the surface in real-time during the inspection, providing at least 1 ft. accurate surface locations along the length of the pipeline, laterally as well as depth for cases where the exact pipe alignment is not known and provide Global Positioning System (GPS) data.
- (8) Be able to deploy and operate device within pipeline at a minimum flow rate of 1 ft per second (non-pull tape method).
- (9) Be able to inspect pipeline with up to 1000 feet of tether.
- (10) Enter the pipeline through a minimum 2-inch I.D. opening.
- (11) Be able to disinfect device prior to deployment within potable pipeline. Devices previously deployed within wastewater piping systems are not to be utilized within

potable water pipelines.

- (12) Detect leaks as small as 0.01 gallons per minute at 90 psi of pressure and 0.1 gallons per minute at 25 psi.
- (13) Be capable of locating leaks within 12 inches of exact location.
- (14) Be capable of providing preliminary results on-site during the inspection before demobilizing from the site.
- (15) Provide mapping grade GPS surface markings depicting location of pipeline every 300 feet and at each bend as requested, to allow accurate updating of Geographic Information System (GIS) databases.
- (16) Provide detailed report of pipeline segment(s) assessed within GIS format using mapping-grade GPS data. The report must include location and rating/size of each leak detected during assessment.
- (17) Reports and deliverables must be submitted in hard copies (three copies) and electronic format with database, information viewable in ArcMap with all pertinent information. Report should include at minimum; executive summary, location map of the project, indicating start and end of project, date started, and date completed, tables with pertinent information, pictures, videos of CCTV, and any other information necessary for the project. Conclusion must be clear and concise depicting the condition of pipe at the time of inspection. Database tables will be named clearly identifying the information.

63.11DR.9 EXECUTION

- (1) Digitally Formatted Inspections: The Contractor will inspect water pipelines with pan and tilt imagery as specified so as to record all relevant construction features and defects of the pipeline including leaks as permanent record. Inspection of pipelines must be carried out in a format approved by the Engineer. A skilled technician who will be located at the control panel in the mobile television studio will control the operation of the equipment.
- (2) The unit will be positioned to reduce the risk of picture distortion. The lens will be positioned centrally at the spring-line (i.e. in prime position) within the water main. In all instances the lens must be directed along the longitudinal axis of the water main when in prime position. A positioning tolerance of $\pm 10\%$ of the vertical water main dimension will be allowed when the camera is in prime position.

63.11DR.10 INSPECTION REQUIREMENTS

- (1) Any operator responsible for data collection and defect coding must hold a current PACP Certification. Such certification must be submitted to the Engineer prior to start of any work.
- (2) When the digital scanner is being inserted into the water main chamber, valve or opening, the video file will be paused and will be restarted when the operator is ready to commence the pipe inspection.
- (3) The inspection will commence from starting point to termination point as specified herein and as directed by the Engineer.
- (4) The operator will use PACP codes that are approved by the Engineer.

- (5) During the course of the inspection the Engineer may indicate the specific views appearing on the monitor that are to be photographed. The size of the photographs will not be less than 3" x 4". The cost of the photographs, ordered taken by the Engineer, will be deemed included in the contract price for Item No. 63.12DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF WATER MAINS. The photographs taken during the inspection will be mounted within the pre- and post inspection report and keyed to their exact location on the route sheet.

63.11DR.11 PRICE TO COVER

The contract price for Item No. 63.12DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF WATER MAINS will be the unit price bid per linear foot of watermain inspected by television inspection and digital audio-visual recording under this section and will cover the cost of all labor, supervision and technicians, mobile television studios, equipment, power, materials and insurance required and necessary to perform the closed circuit television inspection, digital audio-visual recording, taking of photographs ordered by the Engineer, preparing the reports detailing the results of the inspection and do all the work incidental thereto, all in accordance with the plans and specifications, and as directed by the Engineer. The contractor will be required to submit the audio-visual recording on a DVD or Flash Drive as requested by the Engineer.

Payment for Television Inspection and Digital Audio-Visual Recording of Watermains will be made under the Item Number as calculated below:

The Item Number for Television Inspection and Digital Audio-Visual Recording of Watermains has seven characters. (The decimal point is considered a character, the third character.)

- (1) The first five characters will define Television Inspection and Digital Audio-Visual Recording of Watermains:
63.12
- (2) The sixth and seventh characters will define Television Inspection and Digital Audio-Visual Recording of Watermains:
DR - Television Inspection and Digital Audio-Visual Recording of Watermains
- (3) The Item Number together with Description and Pay Unit as provided in the Bid Schedule is provided below:

Item No.	Description	Pay Unit
63.11DR	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF WATER MAINS	LF

- (8) **Refer to Subsection 71.41.4 - Specific Pavement Restoration Provisions**, Page 531:
Add the following to **Subsection 71.41.4**:

(E) Specific Pavement Restoration Provisions:

- (1) Within the limits of the highway reconstruction the restoration shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. HBPED800Q.

(2) In street areas requiring sewer and water main work outside the limits of highway reconstruction the restoration shall be as follows:

(A) In Streets Requiring Overlay:

- (a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of a minimum of three (3) inches of binder mixture on a base course of a minimum of six (6) inches of concrete, to match the existing pavement as directed by the Engineer.
- (b) Finally an overlay of two (2) inches of asphaltic concrete wearing course shall be installed over the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway.

(B) In Streets Not Requiring Overlay:

- (a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a minimum of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of six (6) inches of concrete, to match the existing pavement as directed by the Engineer.

(3) The following requirements apply:

- (a) Before the top course is installed, an additional width of asphalt beyond the edge of new base course shall be saw-cut and removed from all edges of trenches to a depth to accommodate the specified top course and the entire area restored. This additional removal shall be in accordance with paragraph (b) below.
- (b) Pavement excavation along with saw cutting of pavements for sewer and water main trenches shall be in accordance with **Section 71.21 - Pavement Excavation** of the Standard Sewer And Water Main Specifications.
- (c) At locations requiring the installation of a concrete base course, a reflective cracking membrane shall be installed over joints prior to restoration, the cost of which shall be deemed included in the prices bid for all pavement restoration items. Additionally, appropriate pavement keys as described below shall be used.
- (d) Pavement keys **Type B-1** shall be used to insure a desired four (4) inch curb reveal (two and one-half (2-1/2) inch absolute minimum). Pavement key **Type A** shall be used in all intersections. Both keys are to be per Department Of Transportation Specifications and Standard Details of Construction.
- (e) Unless otherwise specified, the cost for Proctor analyses, in-place soil density tests, tack coating, eradication of temporary roadway markings, stripping or milling of pavement keys and adjustment of city-owned castings for all roadway work shall be deemed included in the prices bid for all pavement restoration items.
- (f) Payment for placement of temporary pavement marking shall be made under Item No. 6.49 - TEMPORARY PAVEMENT MARKINGS (4" WIDE).
- (g) Payment for removal of existing pavement markings shall be made under Item No. 6.53 - REMOVE EXISTING LANE MARKINGS (4"WIDE).

(h) Payment for placement of permanent pavement marking with thermoplastic reflectorized pavement markings (crosswalk and lane dividers) shall be made under Item No. 6.44 - THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE).

(i) Payment for pavement restoration shall be made under the following items:

<u>Item No.</u>	<u>Item</u>	<u>Payment Description</u>
4.02 AG	Asphaltic Concrete Wearing Course, 3" Thick	(For asphaltic concrete wearing course top course when <u>no</u> overlay is required.)
4.04 HB	Concrete Base For Pavement, 9" Thick (High Early Strength)	(For concrete base course over trenches and cutbacks.)

C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

- 1) **Refer** to **Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 11. Fabrication:**, Page 4;
Add the following to **Section 11:**

All steel water mains shall be spiral welded pipes, and all steel water main fittings shall be fabricated from qualified spiral welded pipe. Can type pipe is not acceptable.

- 2) **Refer** to **Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 13. Special Fittings:**, Page 5;
Add the following to **Section 13:**

The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

- 3) Reference the NYCDEP Specifications for Trunk Main Work, Division 2, Article 51.A. In addition to the methods specified in this article, shop applied polyurethane exterior coatings meeting the requirements of AWWA C222 and heat-shrinkable cross-linked polyolefin exterior coatings meeting the requirements of AWWA C216 are acceptable.

END OF SECTION

This Section consists of nineteen (19) pages

ASB - PAGES

**SPECIFICATIONS FOR
ABATEMENT OF ASBESTOS
CONTAINING MATERIALS**

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

ABATEMENT OF ASBESTOS-CONTAINING MATERIALS ASSOCIATED WITH

RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK

FLUSHING MEADOWS/CORONA PARK

BOROUGH OF QUEENS

(NO TEXT ON THIS PAGE)

**SPECIFICATIONS FOR
ABATEMENT OF ASBESTOS-CONTAINING
MATERIALS ASSOCIATED WITH**

**RECONSTRUCTION OF TIDE GATE BRIDGE OVER
FLUSHING CREEK
FLUSHING MEADOWS/CORONA PARK
QUEENS, NY 11368**

Prepared For:



**Department of
Design and
Construction**

**Safety and Site Support Division
Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, 3rd Floor
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LiRo Project Number: 17-155-0265
Contract Registration Number: 20181405131
Contract Registration Date: October 1, 2017

November 2017 Version



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TABLE OF CONTENTS

**SECTION 028013 – GENERAL CONTRACTOR WORK ALLOWANCE
FOR INCIDENTAL ASBESTOS ABATEMENT**

**SECTION 220013 – PLUMBING CONTRACTOR WORK ALLOWANCE
FOR INCIDENTAL ASBESTOS ABATEMENT**

**SECTION 230013 – HVAC CONTRACTOR WORK ALLOWANCE
FOR INCIDENTAL ASBESTOS ABATEMENT**

**SECTION 260013 – ELECTRICAL CONTRACTOR WORK ALLOWANCE
FOR INCIDENTAL ASBESTOS ABATEMENT**

SECTION 028213 – ASBESTOS ABATEMENT

APPENDIX A – ASBESTOS ABATEMENT DRAWINGS

H001.00 – ASBESTOS ABATEMENT – GENERAL NOTES

H002.00 – ASBESTOS ABATEMENT – EXISTING BRIDGE PLAN



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**SECTION 028013 – GENERAL CONTRACTOR WORK
NOVEMBER 2017 VERSION**

ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT

1.01 SCOPE FOR ASBESTOS ABATEMENT WORK

- A. The "General Conditions" apply to the work of this Section.
- B. The asbestos abatement contractor shall remove asbestos containing materials as needed to perform the other work of this Contract when discovered during the course of work. When required, the asbestos abatement contractor shall replace the ACM with non-asbestos containing materials. An allowance of **\$15,000.00** for the **General Contractor** is herein established for this incidental work when so ordered and authorized by the Commissioner.
- C. All work shall be done in accordance with the applicable provisions of the rules and regulations of the asbestos control program as promulgated by Title 15 Chapter I of RCNY and New York State Department of Labor Industrial Code Rule 56 cited as 12 NYCRR Part 56, whichever is more stringent as per latest amendments to these laws and as modified herein by these specifications.
- D. All disposal of asbestos contaminated material shall be per Local Law 70/85.
- E. The asbestos abatement contractor's attention is directed to the fact that certain methods of asbestos abatement are protected by patents. To date, patents have been issued with respect to "negative pressure enclosure" or "negative-air" or "reduced pressure" and "glove bag".
- F. The asbestos abatement contractor shall be solely responsible for and shall hold the Department of Design and Construction and the City harmless from any and all damages, losses and expenses resulting from any infringement by the asbestos abatement contractor of any patent, including but not limited to the patents described above, used by the asbestos abatement contractor during performance of this agreement.
- G. "Asbestos" shall mean any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite and actinolite.
- H. Prior to starting, the asbestos abatement contractor must notify the Commissioner of the Department of Design and Construction if he/she anticipates any difficulty in performing the Work as required by these Specifications. The asbestos abatement



contractor is responsible to prepare and submit all filings, notifications, etc. required by all City, State and Federal regulatory agencies having jurisdiction.

The asbestos abatement contractor is responsible for submitting the Asbestos Project Notification Form (ACP-7 Form) to the Department of Environmental Protection, Asbestos Control Program, as per Title 15, Chapter I of RCNY and to the NYSDOL as per Industrial Code Rule 56.

The asbestos abatement contractor is responsible for preparing, and submitting Asbestos Variance Application (ACP-9). If a Variance is required, the asbestos abatement contractor is responsible to retain a NYSDOL Asbestos Project Designer, as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required variance.

The general contractor is responsible for preparing and submitting an Asbestos Abatement Permit and/or Work Place Safety Plans (WPSP) that may be required for the completion of the Contract or incidental work. If such plans are required, the general contractor is responsible for retaining a registered design professional as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required plans.

The asbestos abatement contractor is responsible for the submission of all required documents to the NYCDEP to acquire the appropriate Asbestos Project Conditional Closeout (ACP-20) and/or Asbestos Project Completion Forms (ACP-21) on a timely basis for the completion of the incidental work encountered under this contract.

The asbestos abatement contractor will be required to attend an on-site job meeting with the Construction Project Manager prior to the start of work to examine conditions and plan the sequence of operations, etc.

The asbestos abatement contractor shall have a NYSDOL/NYCDEP Asbestos Supervisor onsite to oversee the work and conduct a final visual inspection as required by both Title 15, Chapter 1 of the RCNY and NYSDOL Industrial Code Rule 56.

- I. All work shall be done during regular working hours unless the asbestos abatement contractor requests authorization to work in other than regular working hours and such authorization is granted by the Commissioner. (Regular work hours are those hours during which any given facility, in which work is to be done, is customarily open and functioning, normally between the hours of 8:00 A.M. and 4:00 P.M. Monday - Friday.) If such work schedule is authorized by the Commissioner, the work shall be done at no additional cost to the City.
- J. The Commissioner may order that work be done in other than regular working hours as herein by defined and this order may require the asbestos abatement



contractor to pay premium or overtime wages to complete the work. If the Commissioner orders work in other than regular working hours, the asbestos abatement contractor shall multiply the unit price for that portion of the work requiring premium wages by 1.50 when computing payment in accordance with Paragraph 1.09. All requests for premium payment must be supported by certified payroll sheets and field sheets approved by the Construction Project Manager.

1.02 QUALIFICATIONS OF ASBESTOS ABATEMENT CONTRACTOR

- A. Requirements: The asbestos abatement contractor must be approved through the Department's Request for Subcontractor Approval, administered by the Agency Chief Contracting Office (ACCO), Vendor Integrity Unit. The asbestos abatement contractor must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (6) below. Such documentation shall include without limitation, all required licenses, certificates, and documentation.
1. The asbestos abatement contractor must, whether an individual, corporation, partnership, joint venture or other legal entity, demonstrate for the three year period prior to the work that it has been licensed by the New York State Department of Labor (NYSDOL), as an "Asbestos Abatement Contractor". The asbestos abatement contractor shall submit copies of the asbestos abatement contractors NYSDOL License for the past three years
 2. The asbestos abatement contractor must, for the three-year period prior to the work, have been in the business of providing asbestos abatement services as a routine part of its daily operations.
 3. The asbestos abatement contractor proposing to do asbestos abatement work must be thoroughly experienced in such work and must submit a list of five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$1,000,000 in each of the three years.
 4. For each project submitted to meet the experience requirements set forth above, the asbestos abatement contractor must submit the following information for the project; name and location of the project; name title and telephone number and email address of the owner or the owner's representative who is familiar with the asbestos abatement contractor's work; brief description of the scope of work completed as a prime or sub-asbestos abatement contractor; amount of contract or subcontract and the date of completion.
 5. The asbestos abatement contractor must demonstrate that it has the financial resources, certified supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking



into consideration other business commitments. The asbestos abatement contractor must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract. The Department may also conduct an inspection of the asbestos abatement contractor's facility to verify if the contractor has equipment and staffing to perform the work.

6. The asbestos abatement contractor must submit a copy of their Corporate Health and Safety Plan for review and acceptance. A Job Hazard Analysis (JHA) for the specific work conducted must be included.
- B. Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics thereof. Provide materials or workmanship that meet or exceed the specifically named codes or standards where required by these specifications.
- C. Site Investigation: Asbestos abatement contractor shall inspect all the specifications and related drawings, and will investigate and confirm the site conditions affecting the work, including, but not limited to (1) through (5) below.
The asbestos abatement contractor will attend a walkthrough site inspection with the department's Project Manager and the Third-Party Air Monitor prior to the work. Such walkthrough will be scheduled at the Department's convenience.
1. Physical considerations and conditions of both the material and structure. These considerations include any obstacles or obstructions encountered in accessing or removing the material.
 2. Handling, storage, transportation and disposal of the material.
 3. Availability of qualified and skilled labor.
 4. Availability of utilities.
 5. Exact quantities of all materials to be disturbed and/or removed

1.03 ASBESTOS ABATEMENT CONTRACTOR RESPONSIBILITIES

The asbestos abatement contractor will visit the subject location within one (1) working day of notification to ascertain actual work required. If the project is identified as being "urgent", then work shall commence no later than 48 hours from the time of notification. In this event, the asbestos abatement contractor shall immediately notify when applicable EPA NESHAPS Coordinator, NYSDOL Asbestos Control Bureau and NYCDEP Asbestos



Control Program of start of the work and file the necessary Asbestos Notifications and any applicable Variance Applications with the regulatory agencies cited above.

In the event that the project is not classified as "urgent" the asbestos abatement contractor shall notify the EPA NESHAPS Coordinator, NYSDOL and NYCDEP by submitting the requisite asbestos project notification forms, postmarked 10 days before activity begins if 260 linear feet or more and/or 160 square feet or more of asbestos containing material will be disturbed.

The following information must be included in the notification:

- A. Name and address of building City or operator;
- B. Project description:
 - 1. Size - square feet, number of linear feet, etc;
 - 2. Age - date of construction and renovations (if known);
 - 3. Use - i.e., office, school, industrial, etc.
 - 4. Scope - repair, demolition, cleaning, etc.
- C. Amount of asbestos involved in work and an explanation of techniques used to determine the amount;
- D. Building location/address, including Block and Lot numbers;
- E. Work schedule including the starting and completion dates;
- F. Abatement methods to be employed;
- G. Procedures for removal of asbestos-containing material;
- H. Name, title and authority of governmental representative sponsoring project.

1.04 WORK INCLUDED IN UNIT PRICE

The asbestos abatement contractor will be paid a basic unit price of **\$25.00** per square feet for the removal and disposal of asbestos containing material and replacement of the same with non-asbestos containing materials.

Unit price shall include all costs necessary to do the work of this Contract, including but not limited to: labor, materials, equipment, utilities, disposal, insurance, overhead and profit.



1.05 AIR MONITORING – ASBESTOS ABATEMENT CONTRACTOR

- A. “Air Sampling” shall mean the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400 or the provisional transmission electron microscopy methods developed by the USEPA and/or National Institute of Standard and Technology which are utilized for lower detectability and specific fiber identification.
- B. Air monitoring of asbestos abatement contractor’s personnel will be performed in conformance with OSHA requirements, (All costs associated with this work are deemed included in the unit price.).
- C. Qualifications of Testing Laboratory:

The industrial hygiene laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).

Note: Work area air testing and analysis before, during and upon completion of work (clearance testing) will be performed by a Third Party Air Monitor under separate Contract with the City.

1.06 THIRD PARTY MONITORING AND LABORATORY

- A. The NYCDDC, at its own expense, will employ the services of an independent Third Party Air Monitoring Firm and Laboratory. The Third Party Air Monitor will perform air sampling activities and project monitoring at the Work Site.
- B. The Laboratory will perform analysis of air samples utilizing Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM).
- C. The Third Party Air Monitoring Firm and the designated Project Monitor shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the asbestos abatement contractor to verify that said performance complies with this Specification. The Third-Party Air Monitor shall be on site throughout the entire abatement operation.
- D. The NYCDDC will be responsible for costs incurred with the Third Party Air Monitoring Firm and laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the asbestos abatement contractor.



1.07 PAYMENT REQUEST DOCUMENTATION

- A. The following information shall be included for each payment request:
1. Description of work performed.
 2. Linear footage and pipe sizes involved.
 3. Square footage for boiler & breaching insulation removed.
 4. Square footage of non pipe and boiler areas removed, patched, enclosed, sealed, or painted.
 5. Square footage of encapsulation, sealing, patching, and painting involved.
 6. Total cost associated with compliance with the assigned task.
 7. Architectural, Electrical, HVAC, Plumbing, etc. work incidental to the Asbestos Abatement Work.
 8. A certified copy (in form 4312-39) to the Comptroller or Financial Officer of the New York City to the effect that the financial statement is true.
 9. A signed copy (in form 6506q-6) of certificate of compliance with non-discriminatory provisions of the Contract.
 10. Attach a copy of valid workmen compensation insurance.
 11. Valid asbestos insurance per occurrence.
 12. General liability insurance when required.
- B. Each payment request shall include a grand total for all work completed that billing period, the landfill waste manifests and a copy of waste transporter permit. The Department of Design and Construction will inspect the work performed, review the cost and approve or disapprove requests for payment.
- C. EXPOSURE LOG: With this final payment, the asbestos abatement contractor shall submit a listing of the names and social security numbers of all employees actively engaged in the abatement work of this Contract. This list shall include a summary showing each part of the abatement work in which the employee was engaged and the dates thereof.

1.08 QUANTITY CALCULATIONS

In order to determine the square footage involved for the various pipe sizes of pipe insulation that might be encountered, the following table is to be used.



PIPE INSULATION SIZE O.D.	PIPE SIZE O.D.	SQUARE FOOTAGE PER LINEAR FOOT
2-1/2"	1/2"	0.65
2-3/4"	3/4"	0.72
3"	1"	0.79
3-1/4"	1-1/4"	0.85
3-1/2"	1-1/2"	0.92
4"	2"	1.05
4-1/2"	2-1/2"	1.18
5"	3"	1.31
6"	3-1/4"	1.57
7"	3-1/2"	1.83
8"	4"	2.09
9"	5"	2.36
10"	6"	2.62
12"	8"	3.14
14"	10"	3.67
16"	12"	4.19
18"	14"	4.71

1.09 METHOD OF PAYMENT

Payment shall be made in accordance with Items A through R below. Payment shall be calculated based on the actual quantity of the item performed by the asbestos abatement contractor, times the unit price specified below. Credits may apply to certain times, as specified below.

A. REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING PIPE INSULATION: Actual linear footage, multiplied by the square footage factor listed for the respective pipe size in Section 1.08, multiplied by the unit price in Section 1.04.

1. EXAMPLE: 100 lin.ft. of 1/2" pipe and 100 lin.ft. of 6" pipe, including elbows, tees. Flanges, etc.
2. 100 X 0.65 = 65 sq.ft. 65 x unit price = Payment
3. 100 X 2.62 = 262 sq.ft. 262 x unit price = Payment

B. REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER INSULATION: (all types including Silicate Block and including the removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.

1. EXAMPLE: Item B. removal and replacement of 1000 S.F. of boiler insulation (incl. Silicate block)
2. 1000 S.F. X (1.5) X the Unit Price = Payment



- C. **REMOVAL, DISPOSAL AND REPLACEMENT OF TANK INSULATION:** (all types including removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.
- D. **REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER UPTAKE, & BREACHING INSULATION:** (all types including stiffening angles and wire lath) Payment shall be made at 2.0 times the unit price per square foot.
- E. **REMOVAL, DISPOSAL AND REPLACEMENT OF DUCT INSULATION:** Payment shall be made at 1.0 times the unit price per square foot.
- F. **REMOVAL, DISPOSAL AND REPLACEMENT OF SOFT ASBESTOS CONTAINING MATERIAL:** (Including sprayed-on fire proofing and sound proofing) Payment shall be made at 1.0 times the unit price per square foot of surface area. Area of irregular surfaces must be calculated and confirmed with DDC representative.
- G. **ACOUSTIC PLASTER REPAIR AND/OR ENCAPSULATION:** Payment shall be made at 0.5 times the unit price per square foot.
- H. **PATCHING OR REPAIR** of items listed in A through F will be paid at 0.33 times the unit price per square foot.
- I. **REMOVAL, DISPOSAL AND REPLACEMENT OF WATERPROOFING ASBESTOS CONTAINING MATERIAL:** (including friable and non-friable waterproofing material from interior and exterior walls, floors, foundations, penetrations, louvers, vents and openings other than windows, doors and skylights) Payment shall be made at 0.5 times the unit price per square foot.
- J. **REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING ELECTRICAL WIRING INSULATION:** (including friable and non-friable wiring insulation) Payment shall be made at 0.33 times the unit price per square foot.
- K. **PAINTING:** Payment shall be made at 0.05 times the unit price per square foot.
- L. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING PLASTER:** from ceilings and walls, including any wire lath and disposal as asbestos containing waste. Payment shall be made at 0.80 times the unit price per square foot.
- M. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES, CEILING TILES, TRANSITE PANELS:** (including any adhesive, glue, mastic and/or underlayment) and disposal as asbestos containing waste. Payment shall be made at 0.40 times the unit price per square foot. If multiple layers are discovered, each additional layer shall be paid at 0.20 times the unit price per square foot.



- N. **ADDITIONAL CLEAN UP/HOUSEKEEPING OF WORK AREA:** (excluding pre-cleaning of work area required by regulations) HEPA vacuuming and wet cleaning of asbestos contaminated surface. Payment shall be made at 0.20 times the unit price per square foot. When GLOVE BAG is employed to remove ACM, cost of HEPA vacuuming and wet cleaning of floor area up to 3 feet on each side of glove-bag shall be included in unit price and no extra payment will be made.
- O. **REMOVAL, DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL:** including mastic, flashing and sealant compound and provide temporary asbestos-free roof covering consisting of one layer of rolled roofing paper sealed with asphaltic roofing compound. Payment shall be made at 0.8 times the unit price per square foot. Credit at a rate of 0.33 times the unit price will be taken for each square foot of temporary roof covering which the asbestos abatement contractor is directed not to install.
- P. **PICK-UP AND DISPOSAL OF GROSS DEBRIS:** (excluding any waste generated from abatement under Item A-R) at a rate of \$150 per cubic yard for asbestos contaminated waste and \$75 per cubic yard for non-asbestos contaminated waste. This cost includes all labor and material cost associated with work.
- Q. **REMOVAL OF ASBESTOS-CONTAINING BRICK, BLOCK, MORTAR, CEMENT OR CONCRETE:** along with all surfacing materials including wire lath and/or other supporting structures and disposal as ACM waste. Payment shall be made at a rate of \$25.00 per cubic foot of material removed.
- R. **REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING WINDOW/DOOR CAULKING:** including friable and non-friable caulking, weather-stripping, glazing, sealants or other waterproofing materials applied to windows, doors, skylights, etc. Payment shall be made at the rate of \$400.00 per opening regardless of size or configuration. This cost includes labor, consumable materials, set-up/breakdown, removal and disposal, as required.

Note 1: CREDIT: For items listed in A through F, a credit at a rate of 0.33 times the unit price, times the respective multiplier (for each item) will be taken for each square foot of insulation which the asbestos abatement contractor is not directed to reapply.

Note 2: MINIMUM PAYMENT: The minimum payment per call at any individual job sites or various job sites during the same day will be eight hundred dollars (\$800.00).

Note 3: All payments shall be made as described in paragraph 1.09 herein.

Note 4: WORKING HIGHER THAN 12 FEET ABOVE FLOOR LEVEL OR WORK REQUIRING COMPLEX SCAFFOLDING OR CONSTRUCTION WORK PLATFORMS: Provisions are made in this Contract to compensate the asbestos abatement contractor for work performed in locations that are difficult to access due to work at elevations that are significantly higher than the normal work level. The unit price for these items will be paid at 1.20 times the unit price described in Paragraphs 1.09, A through R



for those portions of the work that are more than twelve (12) feet above the grade for that would be judged as the normal working level.

1.10 GUARANTEE

- A. Work performed in compliance with each task shall be guaranteed for a period of one year from the date the completed work is accepted by the Department of Design and Construction.
- B. The Commissioner of The Department of Design and Construction will notify the asbestos abatement contractor in writing regarding defects in work under the guarantee.

1.11 OCCUPANCY OF SITE NOT EXCLUSIVE

Attention is specifically drawn to the fact that contractors, performing the work of other Contracts, may be brought upon any of the work sites of this Contract. Therefore, the asbestos abatement contractor shall not have exclusive rights to any site of his work and shall fully cooperate and coordinate his work with the work of other contractors who may be brought upon any site of the work of this Contract. This paragraph applies to those areas outside the regulated Work Area as defined by Title 15, Chapter I of RCNY.

1.12 SUBMITTALS

- A. Pre-Construction Submittals:
 - 1. Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm, facility manager and the Construction Project Manager. At this meeting, the asbestos abatement contractor shall present three copies of the following items:
 - a. asbestos abatement contractor's scope of work, work plan and schedule.
 - b. Asbestos project notifications, approved variances and plans to Government Agencies.
 - c. Copies of Permits, clearance and licenses if required.
 - d. Schedules: the asbestos abatement contractor shall provide to the Construction Project Manager a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. asbestos abatement contractor shall post a copy of all schedules at the site:



- (1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, Work Area preparation, demolition, gross removal, fine cleaning, encapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.
 - (2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.
 - (3) Submit all changes in schedule or staffing to the Construction Project Manager prior to implementation.
- e. Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number to nearest hospital) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements of These Specifications.
- f. Safety Data Sheets (SDS) for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project. No work involving the aforementioned will be allowed to proceed until SDS are reviewed.
- g. Worker Training and Medical Surveillance: The asbestos abatement contractor shall submit a list of the persons who will be employed by him /her to perform the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
- h. Logs: Specimen copies of daily progress log, visitor's log, and disposal log.
- (1) The asbestos abatement contractor shall provide a permanently bound log book of minimum 8-1/2" x 11" size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of the asbestos abatement contractor; name, address and phone number of asbestos abatement contractor and City's third party air



monitoring firm; emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved for entry into the Work Area.

- (2) All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the asbestos abatement contractor shall submit the logbook containing a day-to-day record of personnel log entries countersigned by the Construction Project Manager every day.

- i. Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of ACM, understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

B. During Construction Submittals:

1. Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.
2. Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Construction Project Manager.
3. Floor plans indicating asbestos abatement contractor's current work progress shall be submitted for review by the Construction Project Manager.
4. All asbestos abatement contractors' air monitoring and inspection results.

C. Project Closeout Submittals:

Upon completion of the project and as a condition of acceptance, the asbestos abatement contractor shall present two copies of the following items, bound and indexed:

1. Lien Waivers from asbestos abatement contractor, sub-asbestos abatement contractors and Suppliers,
2. Daily OSHA air monitoring results,



3. All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,
4. Field Sign-In/Sign-Out Logs for every shift,
5. Copies of all Building Department Forms and Permits,
6. A Letter of Compliance stating that all the work on this project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations,
7. All Warranties as stated in the Specifications,
 - a. Fully executed disposal certificates and transportation manifest.
8. Project Record: The asbestos abatement contractor shall maintain a project record for all small and large asbestos projects. During the project, the project record shall be kept on site at all times. Upon completion of the project, the project record shall be maintained by the building owner. The project record shall be submitted to DDC as part of the close out documents. The project record shall consist of:
 - a. Copies of licenses of all asbestos abatement contractors involved in the project;
 - b. Copies of NYCDEP and NYSDOL supervisor and handler certificates for all workers engaged in the project;
 - c. Copies of all project notifications and reports filed with NYCDEP, NYSDOL and USEPA for the project, with any amendments or variances;
 - d. Copies of all asbestos abatement permits, including associated approved plans and work place safety plan;
 - e. A copy of the air sampling log and all air sampling results;
 - f. A copy of the abatement asbestos abatement contractor's daily log book;
 - g. Copies of all asbestos waste manifests;
 - h. A copy of all Project Monitor's Reports (ACP-15).



- i. A copy of each ATR-1 Form completed for the asbestos project (if required).
- j. A copy of each Asbestos Project Conditional Closeout Report (ACP-20) if required.
- k. A copy of the Asbestos Project Completion Form (ACP-21).

1.13 PROTECTION OF FURNITURE AND EQUIPMENT

Cover all furniture and equipment that cannot be removed from Work Areas. Movable furniture and equipment will be removed from Work Areas by the asbestos abatement contractor prior to start of work. At the conclusion of the work (after final air testing), the asbestos abatement contractor will remove all plastic covering on walls, floors, furniture, equipment and reinstall furniture and equipment. He shall remove and store all sheaths, curtains and drapes, and reinstall same following final clean up.

1.14 UTILITIES

A. General:

All temporary facilities shall be subject to the approval of the Commissioner. Prior to starting work at any site, locations and/or sketches (if required) of temporary facilities must be submitted to the Construction Project Manager for the required approval.

B. Water:

The Department of Design and Construction will furnish all water needed for construction, at no cost to the asbestos abatement contractor in buildings under their jurisdiction. However, it is the responsibility of the asbestos abatement contractor to ensure that hot water is provided for showering in the decontamination unit. The asbestos abatement contractor shall furnish, install and maintain any needed equipment to meet these requirements at his own expense.

C. Electricity:

The Department of Design and Construction will furnish all electricity needed for construction, at no cost to the asbestos abatement contractor in a building, under their jurisdiction. The asbestos abatement contractor is responsible for routing the electric power to the abatement Work Area.

All temporary lighting and temporary electrical service for Work Area shall be in weatherproof enclosures and be ground fault protected.



- D. In leased spaces, arrangements for water supplies and electricity must be made with the landlord. However, all such arrangements must be made through and are subject to approval of the Department of Design and Construction. Utilities will be provided at no cost to the asbestos abatement contractor. However, it is the asbestos abatement contractor's (or the general contractor's) responsibility to furnish and install a suitable distribution system to the Work Area. This system will be provided at no cost to the City.

1.15 FEES

The asbestos abatement contractor shall be responsible for any and all fees or charges imposed by Local, State or Federal Law, Rule and Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the date of the Bid opening.

END OF SECTION



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SECTION 220013 – PLUMBING CONTRACTOR WORK
NOVEMBER 2017 VERSION

ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT

1.01 SCOPE FOR ASBESTOS ABATEMENT WORK

- A. The "General Conditions" apply to the work of this Section.
- B. The asbestos abatement contractor shall remove asbestos containing materials as needed to perform the other work of this Contract when discovered during the course of work. When required, the asbestos abatement contractor shall replace the ACM with non-asbestos containing materials. An allowance of **\$5,000.00** for the **Plumbing Contractor** is herein established for this incidental work when so ordered and authorized by the Commissioner.
- C. All work shall be done in accordance with the applicable provisions of the rules and regulations of the asbestos control program as promulgated by Title 15 Chapter I of RCNY and New York State Department of Labor Industrial Code Rule 56 cited as 12 NYCRR Part 56, whichever is more stringent as per latest amendments to these laws and as modified herein by these specifications.
- D. All disposal of asbestos contaminated material shall be per Local Law 70/85.
- E. The asbestos abatement contractor's attention is directed to the fact that certain methods of asbestos abatement are protected by patents. To date, patents have been issued with respect to "negative pressure enclosure" or "negative-air" or "reduced pressure" and "glove bag".
- F. The asbestos abatement contractor shall be solely responsible for and shall hold the Department of Design and Construction and the City harmless from any and all damages, losses and expenses resulting from any infringement by the asbestos abatement contractor of any patent, including but not limited to the patents described above, used by the asbestos abatement contractor during performance of this agreement.
- G. "Asbestos" shall mean any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite and actinolite.
- H. Prior to starting, the asbestos abatement contractor must notify the Commissioner of the Department of Design and Construction if he/she anticipates any difficulty in performing the Work as required by these Specifications. The asbestos abatement



contractor is responsible to prepare and submit all filings, notifications, etc. required by all City, State and Federal regulatory agencies having jurisdiction.

The asbestos abatement contractor is responsible for submitting the Asbestos Project Notification Form (ACP-7 Form) to the Department of Environmental Protection, Asbestos Control Program, as per Title 15, Chapter I of RCNY and to the NYSDOL as per Industrial Code Rule 56.

The asbestos abatement contractor is responsible for preparing, and submitting Asbestos Variance Application (ACP-9). If a Variance is required, the asbestos abatement contractor is responsible to retain a NYSDOL Asbestos Project Designer, as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required variance.

The general contractor is responsible for preparing and submitting an Asbestos Abatement Permit and/or Work Place Safety Plans (WPSP) that may be required for the completion of the Contract or incidental work. If such plans are required, the general contractor is responsible for retaining a registered design professional as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required plans.

The asbestos abatement contractor is responsible for the submission of all required documents to the NYCDEP to acquire the appropriate Asbestos Project Conditional Closeout (ACP-20) and/or Asbestos Project Completion Forms (ACP-21) on a timely basis for the completion of the incidental work encountered under this contract.

The asbestos abatement contractor will be required to attend an on-site job meeting with the Construction Project Manager prior to the start of work to examine conditions and plan the sequence of operations, etc.

The asbestos abatement contractor shall have a NYSDOL/NYCDEP Asbestos Supervisor onsite to oversee the work and conduct a final visual inspection as required by both Title 15, Chapter 1 of the RCNY and NYSDOL Industrial Code Rule 56.

- I. All work shall be done during regular working hours unless the asbestos abatement contractor requests authorization to work in other than regular working hours and such authorization is granted by the Commissioner. (Regular work hours are those hours during which any given facility, in which work is to be done, is customarily open and functioning, normally between the hours of 8:00 A.M. and 4:00 P.M. Monday - Friday.) If such work schedule is authorized by the Commissioner, the work shall be done at no additional cost to the City.
- J. The Commissioner may order that work be done in other than regular working hours as herein by defined and this order may require the asbestos abatement



contractor to pay premium or overtime wages to complete the work. If the Commissioner orders work in other than regular working hours, the asbestos abatement contractor shall multiply the unit price for that portion of the work requiring premium wages by 1.50 when computing payment in accordance with Paragraph 1.09. All requests for premium payment must be supported by certified payroll sheets and field sheets approved by the Construction Project Manager.

1.02 QUALIFICATIONS OF ASBESTOS ABATEMENT CONTRACTOR

- A. Requirements: The asbestos abatement contractor must be approved through the Department's Request for Subcontractor Approval, administered by the Agency Chief Contracting Office (ACCO), Vendor Integrity Unit. The asbestos abatement contractor must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (6) below. Such documentation shall include without limitation, all required licenses, certificates, and documentation.
1. The asbestos abatement contractor must, whether an individual, corporation, partnership, joint venture or other legal entity, demonstrate for the three year period prior to the work that it has been licensed by the New York State Department of Labor (NYSDOL), as an "Asbestos Abatement Contractor". The asbestos abatement contractor shall submit copies of the asbestos abatement contractors NYSDOL License for the past three years
 2. The asbestos abatement contractor must, for the three-year period prior to the work, have been in the business of providing asbestos abatement services as a routine part of its daily operations.
 3. The asbestos abatement contractor proposing to do asbestos abatement work must be thoroughly experienced in such work and must submit a list of five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$1,000,000 in each of the three years.
 4. For each project submitted to meet the experience requirements set forth above, the asbestos abatement contractor must submit the following information for the project; name and location of the project; name title and telephone number and email address of the owner or the owner's representative who is familiar with the asbestos abatement contractor's work; brief description of the scope of work completed as a prime or sub-asbestos abatement contractor; amount of contract or subcontract and the date of completion.
 5. The asbestos abatement contractor must demonstrate that it has the financial resources, certified supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking



into consideration other business commitments. The asbestos abatement contractor must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract. The Department may also conduct an inspection of the asbestos abatement contractor's facility to verify if the contractor has equipment and staffing to perform the work.

6. The asbestos abatement contractor must submit a copy of their Corporate Health and Safety Plan for review and acceptance. A Job Hazard Analysis (JHA) for the specific work conducted must be included.
- B. Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics thereof. Provide materials or workmanship that meet or exceed the specifically named codes or standards where required by these specifications.
- C. Site Investigation: Asbestos abatement contractor shall inspect all the specifications and related drawings, and will investigate and confirm the site conditions affecting the work, including, but not limited to (1) through (5) below.
The asbestos abatement contractor will attend a walkthrough site inspection with the department's Project Manager and the Third-Party Air Monitor prior to the work. Such walkthrough will be scheduled at the Department's convenience.
1. Physical considerations and conditions of both the material and structure. These considerations include any obstacles or obstructions encountered in accessing or removing the material.
 2. Handling, storage, transportation and disposal of the material.
 3. Availability of qualified and skilled labor.
 4. Availability of utilities.
 5. Exact quantities of all materials to be disturbed and/or removed

1.03 ASBESTOS ABATEMENT CONTRACTOR RESPONSIBILITIES

The asbestos abatement contractor will visit the subject location within one (1) working day of notification to ascertain actual work required. If the project is identified as being "urgent", then work shall commence no later than 48 hours from the time of notification. In this event, the asbestos abatement contractor shall immediately notify when applicable EPA NESHAPS Coordinator, NYSDOL Asbestos Control Bureau and NYCDEP Asbestos



Control Program of start of the work and file the necessary Asbestos Notifications and any applicable Variance Applications with the regulatory agencies cited above.

In the event that the project is not classified as "urgent" the asbestos abatement contractor shall notify the EPA NESHAPS Coordinator, NYSDOL and NYCDEP by submitting the requisite asbestos project notification forms, postmarked 10 days before activity begins if 260 linear feet or more and/or 160 square feet or more of asbestos containing material will be disturbed.

The following information must be included in the notification:

- A. Name and address of building City or operator;
- B. Project description:
 - 1. Size - square feet, number of linear feet, etc;
 - 2. Age - date of construction and renovations (if known);
 - 3. Use - i.e., office, school, industrial, etc.
 - 4. Scope - repair, demolition, cleaning, etc.
- C. Amount of asbestos involved in work and an explanation of techniques used to determine the amount;
- D. Building location/address, including Block and Lot numbers;
- E. Work schedule including the starting and completion dates;
- F. Abatement methods to be employed;
- G. Procedures for removal of asbestos-containing material;
- H. Name, title and authority of governmental representative sponsoring project.

1.04 WORK INCLUDED IN UNIT PRICE

The asbestos abatement contractor will be paid a basic unit price of **\$25.00** per square feet for the removal and disposal of asbestos containing material and replacement of the same with non-asbestos containing materials.

Unit price shall include all costs necessary to do the work of this Contract, including but not limited to: labor, materials, equipment, utilities, disposal, insurance, overhead and profit.



1.05 AIR MONITORING – ASBESTOS ABATEMENT CONTRACTOR

- A. “Air Sampling” shall mean the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400 or the provisional transmission electron microscopy methods developed by the USEPA and/or National Institute of Standard and Technology which are utilized for lower detectability and specific fiber identification.
- B. Air monitoring of asbestos abatement contractor’s personnel will be performed in conformance with OSHA requirements, (All costs associated with this work are deemed included in the unit price.).
- C. Qualifications of Testing Laboratory:

The industrial hygiene laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).

Note: Work area air testing and analysis before, during and upon completion of work (clearance testing) will be performed by a Third Party Air Monitor under separate Contract with the City.

1.06 THIRD PARTY MONITORING AND LABORATORY

- A. The NYCDDC, at its own expense, will employ the services of an independent Third Party Air Monitoring Firm and Laboratory. The Third Party Air Monitor will perform air sampling activities and project monitoring at the Work Site.
- B. The Laboratory will perform analysis of air samples utilizing Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM).
- C. The Third Party Air Monitoring Firm and the designated Project Monitor shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the asbestos abatement contractor to verify that said performance complies with this Specification. The Third-Party Air Monitor shall be on site throughout the entire abatement operation.
- D. The NYCDDC will be responsible for costs incurred with the Third Party Air Monitoring Firm and laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the asbestos abatement contractor.



1.07 PAYMENT REQUEST DOCUMENTATION

- A. The following information shall be included for each payment request:
1. Description of work performed.
 2. Linear footage and pipe sizes involved.
 3. Square footage for boiler & breaching insulation removed.
 4. Square footage of non pipe and boiler areas removed, patched, enclosed, sealed, or painted.
 5. Square footage of encapsulation, sealing, patching, and painting involved.
 6. Total cost associated with compliance with the assigned task.
 7. Architectural, Electrical, HVAC, Plumbing, etc. work incidental to the Asbestos Abatement Work.
 8. A certified copy (in form 4312-39) to the Comptroller or Financial Officer of the New York City to the effect that the financial statement is true.
 9. A signed copy (in form 6506q-6) of certificate of compliance with non-discriminatory provisions of the Contract.
 10. Attach a copy of valid workmen compensation insurance.
 11. Valid asbestos insurance per occurrence.
 12. General liability insurance when required.
- B. Each payment request shall include a grand total for all work completed that billing period, the landfill waste manifests and a copy of waste transporter permit. The Department of Design and Construction will inspect the work performed, review the cost and approve or disapprove requests for payment.
- C. EXPOSURE LOG: With this final payment, the asbestos abatement contractor shall submit a listing of the names and social security numbers of all employees actively engaged in the abatement work of this Contract. This list shall include a summary showing each part of the abatement work in which the employee was engaged and the dates thereof.

1.08 QUANTITY CALCULATIONS

In order to determine the square footage involved for the various pipe sizes of pipe insulation that might be encountered, the following table is to be used.



PIPE INSULATION SIZE O.D.	PIPE SIZE O.D.	SQUARE FOOTAGE PER LINEAR FOOT
2-1/2"	1/2"	0.65
2-3/4"	3/4"	0.72
3"	1"	0.79
3-1/4"	1-1/4"	0.85
3-1/2"	1-1/2"	0.92
4"	2"	1.05
4-1/2"	2-1/2"	1.18
5"	3"	1.31
6"	3-1/4"	1.57
7"	3-1/2"	1.83
8"	4"	2.09
9"	5"	2.36
10"	6"	2.62
12"	8"	3.14
14"	10"	3.67
16"	12"	4.19
18"	14"	4.71

1.09 METHOD OF PAYMENT

Payment shall be made in accordance with Items A through R below. Payment shall be calculated based on the actual quantity of the item performed by the asbestos abatement contractor, times the unit price specified below. Credits may apply to certain times, as specified below.

A. REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING PIPE INSULATION: Actual linear footage, multiplied by the square footage factor listed for the respective pipe size in Section 1.08, multiplied by the unit price in Section 1.04.

1. EXAMPLE: 100 lin.ft. of 1/2" pipe and 100 lin.ft. of 6" pipe, including elbows, tees. Flanges, etc.
2. 100 X 0.65 = 65 sq.ft. 65 x unit price = Payment
3. 100 X 2.62 = 262 sq.ft. 262 x unit price = Payment

B. REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER INSULATION: (all types including Silicate Block and including the removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.

1. EXAMPLE: Item B. removal and replacement of 1000 S.F. of boiler insulation (incl. Silicate block)
2. 1000 S.F. X (1.5) X the Unit Price = Payment



- C. **REMOVAL, DISPOSAL AND REPLACEMENT OF TANK INSULATION:** (all types including removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.
- D. **REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER UPTAKE, & BREACHING INSULATION:** (all types including stiffening angles and wire lath) Payment shall be made at 2.0 times the unit price per square foot.
- E. **REMOVAL, DISPOSAL AND REPLACEMENT OF DUCT INSULATION:** Payment shall be made at 1.0 times the unit price per square foot.
- F. **REMOVAL, DISPOSAL AND REPLACEMENT OF SOFT ASBESTOS CONTAINING MATERIAL:** (Including sprayed-on fire proofing and sound proofing) Payment shall be made at 1.0 times the unit price per square foot of surface area. Area of irregular surfaces must be calculated and confirmed with DDC representative.
- G. **ACOUSTIC PLASTER REPAIR AND/OR ENCAPSULATION:** Payment shall be made at 0.5 times the unit price per square foot.
- H. **PATCHING OR REPAIR** of items listed in A through F will be paid at 0.33 times the unit price per square foot.
- I. **REMOVAL, DISPOSAL AND REPLACEMENT OF WATERPROOFING ASBESTOS CONTAINING MATERIAL:** (including friable and non-friable waterproofing material from interior and exterior walls, floors, foundations, penetrations, louvers, vents and openings other than windows, doors and skylights) Payment shall be made at 0.5 times the unit price per square foot.
- J. **REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING ELECTRICAL WIRING INSULATION:** (including friable and non-friable wiring insulation) Payment shall be made at 0.33 times the unit price per square foot.
- K. **PAINTING:** Payment shall be made at 0.05 times the unit price per square foot.
- L. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING PLASTER:** from ceilings and walls, including any wire lath and disposal as asbestos containing waste. Payment shall be made at 0.80 times the unit price per square foot.
- M. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES, CEILING TILES, TRANSITE PANELS:** (including any adhesive, glue, mastic and/or underlayment) and disposal as asbestos containing waste. Payment shall be made at 0.40 times the unit price per square foot. If multiple layers are discovered, each additional layer shall be paid at 0.20 times the unit price per square foot.



- N. **ADDITIONAL CLEAN UP/HOUSEKEEPING OF WORK AREA:** (excluding pre-cleaning of work area required by regulations) HEPA vacuuming and wet cleaning of asbestos contaminated surface. Payment shall be made at 0.20 times the unit price per square foot. When GLOVE BAG is employed to remove ACM, cost of HEPA vacuuming and wet cleaning of floor area up to 3 feet on each side of glove-bag shall be included in unit price and no extra payment will be made.
- O. **REMOVAL, DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL:** including mastic, flashing and sealant compound and provide temporary asbestos-free roof covering consisting of one layer of rolled roofing paper sealed with asphaltic roofing compound. Payment shall be made at 0.8 times the unit price per square foot. Credit at a rate of 0.33 times the unit price will be taken for each square foot of temporary roof covering which the asbestos abatement contractor is directed not to install.
- P. **PICK-UP AND DISPOSAL OF GROSS DEBRIS:** (excluding any waste generated from abatement under Item A-R) at a rate of \$150 per cubic yard for asbestos contaminated waste and \$75 per cubic yard for non-asbestos contaminated waste. This cost includes all labor and material cost associated with work.
- Q. **REMOVAL OF ASBESTOS-CONTAINING BRICK, BLOCK, MORTAR, CEMENT OR CONCRETE:** along with all surfacing materials including wire lath and/or other supporting structures and disposal as ACM waste. Payment shall be made at a rate of \$25.00 per cubic foot of material removed.
- R. **REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING WINDOW/DOOR CAULKING:** including friable and non-friable caulking, weather-stripping, glazing, sealants or other waterproofing materials applied to windows, doors, skylights, etc. Payment shall be made at the rate of \$400.00 per opening regardless of size or configuration. This cost includes labor, consumable materials, set-up/breakdown, removal and disposal, as required.

Note 1: CREDIT: For items listed in A through F, a credit at a rate of 0.33 times the unit price, times the respective multiplier (for each item) will be taken for each square foot of insulation which the asbestos abatement contractor is not directed to reapply.

Note 2: MINIMUM PAYMENT: The minimum payment per call at any individual job sites or various job sites during the same day will be eight hundred dollars (\$800.00).

Note 3: All payments shall be made as described in paragraph 1.09 herein.

Note 4: WORKING HIGHER THAN 12 FEET ABOVE FLOOR LEVEL OR WORK REQUIRING COMPLEX SCAFFOLDING OR CONSTRUCTION WORK PLATFORMS: Provisions are made in this Contract to compensate the asbestos abatement contractor for work performed in locations that are difficult to access due to work at elevations that are significantly higher than the normal work level. The unit price for these items will be paid at 1.20 times the unit price described in Paragraphs 1.09, A through R



for those portions of the work that are more than twelve (12) feet above the grade for that would be judged as the normal working level.

1.10 GUARANTEE

- A. Work performed in compliance with each task shall be guaranteed for a period of one year from the date the completed work is accepted by the Department of Design and Construction.
- B. The Commissioner of The Department of Design and Construction will notify the asbestos abatement contractor in writing regarding defects in work under the guarantee.

1.11 OCCUPANCY OF SITE NOT EXCLUSIVE

Attention is specifically drawn to the fact that contractors, performing the work of other Contracts, may be brought upon any of the work sites of this Contract. Therefore, the asbestos abatement contractor shall not have exclusive rights to any site of his work and shall fully cooperate and coordinate his work with the work of other contractors who may be brought upon any site of the work of this Contract. This paragraph applies to those areas outside the regulated Work Area as defined by Title 15, Chapter I of RCNY.

1.12 SUBMITTALS

- A. Pre-Construction Submittals:
 - 1. Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm, facility manager and the Construction Project Manager. At this meeting, the asbestos abatement contractor shall present three copies of the following items:
 - a. asbestos abatement contractor's scope of work, work plan and schedule.
 - b. Asbestos project notifications, approved variances and plans to Government Agencies.
 - c. Copies of Permits, clearance and licenses if required.
 - d. Schedules: the asbestos abatement contractor shall provide to the Construction Project Manager a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. asbestos abatement contractor shall post a copy of all schedules at the site:



- (1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, Work Area preparation, demolition, gross removal, fine cleaning, encapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.
 - (2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.
 - (3) Submit all changes in schedule or staffing to the Construction Project Manager prior to implementation.
- e. Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number to nearest hospital) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements of These Specifications.
- f. Safety Data Sheets (SDS) for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project. No work involving the aforementioned will be allowed to proceed until SDS are reviewed.
- g. Worker Training and Medical Surveillance: The asbestos abatement contractor shall submit a list of the persons who will be employed by him /her to perform the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
- h. Logs: Specimen copies of daily progress log, visitor's log, and disposal log.
- (1) The asbestos abatement contractor shall provide a permanently bound log book of minimum 8-1/2" x 11" size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of the asbestos abatement contractor; name, address and phone number of asbestos abatement contractor and City's third party air



monitoring firm; emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved for entry into the Work Area.

- (2) All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the asbestos abatement contractor shall submit the logbook containing a day-to-day record of personnel log entries countersigned by the Construction Project Manager every day.

- i. Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of ACM, understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

B. During Construction Submittals:

1. Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.
2. Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Construction Project Manager.
3. Floor plans indicating asbestos abatement contractor's current work progress shall be submitted for review by the Construction Project Manager.
4. All asbestos abatement contractors' air monitoring and inspection results.

C. Project Closeout Submittals:

Upon completion of the project and as a condition of acceptance, the asbestos abatement contractor shall present two copies of the following items, bound and indexed:

1. Lien Waivers from asbestos abatement contractor, sub-asbestos abatement contractors and Suppliers,
2. Daily OSHA air monitoring results,



3. All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,
4. Field Sign-In/Sign-Out Logs for every shift,
5. Copies of all Building Department Forms and Permits,
6. A Letter of Compliance stating that all the work on this project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations,
7. All Warranties as stated in the Specifications,
 - a. Fully executed disposal certificates and transportation manifest.
8. Project Record: The asbestos abatement contractor shall maintain a project record for all small and large asbestos projects. During the project, the project record shall be kept on site at all times. Upon completion of the project, the project record shall be maintained by the building owner. The project record shall be submitted to DDC as part of the close out documents. The project record shall consist of:
 - a. Copies of licenses of all asbestos abatement contractors involved in the project;
 - b. Copies of NYCDEP and NYSDOL supervisor and handler certificates for all workers engaged in the project;
 - c. Copies of all project notifications and reports filed with NYCDEP, NYSDOL and USEPA for the project, with any amendments or variances;
 - d. Copies of all asbestos abatement permits, including associated approved plans and work place safety plan;
 - e. A copy of the air sampling log and all air sampling results;
 - f. A copy of the abatement asbestos abatement contractor's daily log book;
 - g. Copies of all asbestos waste manifests;
 - h. A copy of all Project Monitor's Reports (ACP-15).



- i. A copy of each ATR-1 Form completed for the asbestos project (if required).
- j. A copy of each Asbestos Project Conditional Closeout Report (ACP-20) if required.
- k. A copy of the Asbestos Project Completion Form (ACP-21).

1.13 PROTECTION OF FURNITURE AND EQUIPMENT

Cover all furniture and equipment that cannot be removed from Work Areas. Movable furniture and equipment will be removed from Work Areas by the asbestos abatement contractor prior to start of work. At the conclusion of the work (after final air testing), the asbestos abatement contractor will remove all plastic covering on walls, floors, furniture, equipment and reinstall furniture and equipment. He shall remove and store all sheaths, curtains and drapes, and reinstall same following final clean up.

1.14 UTILITIES

A. General:

All temporary facilities shall be subject to the approval of the Commissioner. Prior to starting work at any site, locations and/or sketches (if required) of temporary facilities must be submitted to the Construction Project Manager for the required approval.

B. Water:

The Department of Design and Construction will furnish all water needed for construction, at no cost to the asbestos abatement contractor in buildings under their jurisdiction. However, it is the responsibility of the asbestos abatement contractor to ensure that hot water is provided for showering in the decontamination unit. The asbestos abatement contractor shall furnish, install and maintain any needed equipment to meet these requirements at his own expense.

C. Electricity:

The Department of Design and Construction will furnish all electricity needed for construction, at no cost to the asbestos abatement contractor in a building, under their jurisdiction. The asbestos abatement contractor is responsible for routing the electric power to the abatement Work Area.

All temporary lighting and temporary electrical service for Work Area shall be in weatherproof enclosures and be ground fault protected.



- D. In leased spaces, arrangements for water supplies and electricity must be made with the landlord. However, all such arrangements must be made through and are subject to approval of the Department of Design and Construction. Utilities will be provided at no cost to the asbestos abatement contractor. However, it is the asbestos abatement contractor's (or the general contractor's) responsibility to furnish and install a suitable distribution system to the Work Area. This system will be provided at no cost to the City.

1.15 FEES

The asbestos abatement contractor shall be responsible for any and all fees or charges imposed by Local, State or Federal Law, Rule and Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the date of the Bid opening.

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SECTION 230013 – HVAC CONTRACTOR WORK
NOVEMBER 2017 VERSION

ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT

1.01 SCOPE FOR ASBESTOS ABATEMENT WORK

- A. The "General Conditions" apply to the work of this Section.
- B. The asbestos abatement contractor shall remove asbestos containing materials as needed to perform the other work of this Contract when discovered during the course of work. When required, the asbestos abatement contractor shall replace the ACM with non-asbestos containing materials. An allowance of **\$5,000.00** for the **HVAC Contractor** is herein established for this incidental work when so ordered and authorized by the Commissioner.
- C. All work shall be done in accordance with the applicable provisions of the rules and regulations of the asbestos control program as promulgated by Title 15 Chapter I of RCNY and New York State Department of Labor Industrial Code Rule 56 cited as 12 NYCRR Part 56, whichever is more stringent as per latest amendments to these laws and as modified herein by these specifications.
- D. All disposal of asbestos contaminated material shall be per Local Law 70/85.
- E. The asbestos abatement contractor's attention is directed to the fact that certain methods of asbestos abatement are protected by patents. To date, patents have been issued with respect to "negative pressure enclosure" or "negative-air" or "reduced pressure" and "glove bag".
- F. The asbestos abatement contractor shall be solely responsible for and shall hold the Department of Design and Construction and the City harmless from any and all damages, losses and expenses resulting from any infringement by the asbestos abatement contractor of any patent, including but not limited to the patents described above, used by the asbestos abatement contractor during performance of this agreement.
- G. "Asbestos" shall mean any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtonite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite and actinolite.
- H. Prior to starting, the asbestos abatement contractor must notify the Commissioner of the Department of Design and Construction if he/she anticipates any difficulty in performing the Work as required by these Specifications. The asbestos abatement



contractor is responsible to prepare and submit all filings, notifications, etc. required by all City, State and Federal regulatory agencies having jurisdiction.

The asbestos abatement contractor is responsible for submitting the Asbestos Project Notification Form (ACP-7 Form) to the Department of Environmental Protection, Asbestos Control Program, as per Title 15, Chapter I of RCNY and to the NYSDOL as per Industrial Code Rule 56.

The asbestos abatement contractor is responsible for preparing, and submitting Asbestos Variance Application (ACP-9). If a Variance is required, the asbestos abatement contractor is responsible to retain a NYSDOL Asbestos Project Designer, as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required variance.

The general contractor is responsible for preparing and submitting an Asbestos Abatement Permit and/or Work Place Safety Plans (WPSP) that may be required for the completion of the Contract or incidental work. If such plans are required, the general contractor is responsible for retaining a registered design professional as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required plans.

The asbestos abatement contractor is responsible for the submission of all required documents to the NYCDEP to acquire the appropriate Asbestos Project Conditional Closeout (ACP-20) and/or Asbestos Project Completion Forms (ACP-21) on a timely basis for the completion of the incidental work encountered under this contract.

The asbestos abatement contractor will be required to attend an on-site job meeting with the Construction Project Manager prior to the start of work to examine conditions and plan the sequence of operations, etc.

The asbestos abatement contractor shall have a NYSDOL/NYCDEP Asbestos Supervisor onsite to oversee the work and conduct a final visual inspection as required by both Title 15, Chapter 1 of the RCNY and NYSDOL Industrial Code Rule 56.

- I. All work shall be done during regular working hours unless the asbestos abatement contractor requests authorization to work in other than regular working hours and such authorization is granted by the Commissioner. (Regular work hours are those hours during which any given facility, in which work is to be done, is customarily open and functioning, normally between the hours of 8:00 A.M. and 4:00 P.M. Monday - Friday.) If such work schedule is authorized by the Commissioner, the work shall be done at no additional cost to the City.
- J. The Commissioner may order that work be done in other than regular working hours as herein by defined and this order may require the asbestos abatement



contractor to pay premium or overtime wages to complete the work. If the Commissioner orders work in other than regular working hours, the asbestos abatement contractor shall multiply the unit price for that portion of the work requiring premium wages by 1.50 when computing payment in accordance with Paragraph 1.09. All requests for premium payment must be supported by certified payroll sheets and field sheets approved by the Construction Project Manager.

1.02 QUALIFICATIONS OF ASBESTOS ABATEMENT CONTRACTOR

- A. Requirements: The asbestos abatement contractor must be approved through the Department's Request for Subcontractor Approval, administered by the Agency Chief Contracting Office (ACCO), Vendor Integrity Unit. The asbestos abatement contractor must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (6) below. Such documentation shall include without limitation, all required licenses, certificates, and documentation.
1. The asbestos abatement contractor must, whether an individual, corporation, partnership, joint venture or other legal entity, demonstrate for the three year period prior to the work that it has been licensed by the New York State Department of Labor (NYSDOL), as an "Asbestos Abatement Contractor". The asbestos abatement contractor shall submit copies of the asbestos abatement contractors NYSDOL License for the past three years
 2. The asbestos abatement contractor must, for the three-year period prior to the work, have been in the business of providing asbestos abatement services as a routine part of its daily operations.
 3. The asbestos abatement contractor proposing to do asbestos abatement work must be thoroughly experienced in such work and must submit a list of five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$1,000,000 in each of the three years.
 4. For each project submitted to meet the experience requirements set forth above, the asbestos abatement contractor must submit the following information for the project; name and location of the project; name title and telephone number and email address of the owner or the owner's representative who is familiar with the asbestos abatement contractor's work; brief description of the scope of work completed as a prime or sub-asbestos abatement contractor; amount of contract or subcontract and the date of completion.
 5. The asbestos abatement contractor must demonstrate that it has the financial resources, certified supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking



into consideration other business commitments. The asbestos abatement contractor must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract. The Department may also conduct an inspection of the asbestos abatement contractor's facility to verify if the contractor has equipment and staffing to perform the work.

6. The asbestos abatement contractor must submit a copy of their Corporate Health and Safety Plan for review and acceptance. A Job Hazard Analysis (JHA) for the specific work conducted must be included.
- B. Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics thereof. Provide materials or workmanship that meet or exceed the specifically named codes or standards where required by these specifications.
- C. Site Investigation: Asbestos abatement contractor shall inspect all the specifications and related drawings, and will investigate and confirm the site conditions affecting the work, including, but not limited to (1) through (5) below.
The asbestos abatement contractor will attend a walkthrough site inspection with the department's Project Manager and the Third-Party Air Monitor prior to the work. Such walkthrough will be scheduled at the Department's convenience.
1. Physical considerations and conditions of both the material and structure. These considerations include any obstacles or obstructions encountered in accessing or removing the material.
 2. Handling, storage, transportation and disposal of the material.
 3. Availability of qualified and skilled labor.
 4. Availability of utilities.
 5. Exact quantities of all materials to be disturbed and/or removed

1.03 ASBESTOS ABATEMENT CONTRACTOR RESPONSIBILITIES

The asbestos abatement contractor will visit the subject location within one (1) working day of notification to ascertain actual work required. If the project is identified as being "urgent", then work shall commence no later than 48 hours from the time of notification. In this event, the asbestos abatement contractor shall immediately notify when applicable EPA NESHAPS Coordinator, NYSDOL Asbestos Control Bureau and NYCDEP Asbestos



Control Program of start of the work and file the necessary Asbestos Notifications and any applicable Variance Applications with the regulatory agencies cited above.

In the event that the project is not classified as "urgent" the asbestos abatement contractor shall notify the EPA NESHAPS Coordinator, NYSDOL and NYCDEP by submitting the requisite asbestos project notification forms, postmarked 10 days before activity begins if 260 linear feet or more and/or 160 square feet or more of asbestos containing material will be disturbed.

The following information must be included in the notification:

- A. Name and address of building City or operator;
- B. Project description:
 - 1. Size - square feet, number of linear feet, etc;
 - 2. Age - date of construction and renovations (if known);
 - 3. Use - i.e., office, school, industrial, etc.
 - 4. Scope - repair, demolition, cleaning, etc.
- C. Amount of asbestos involved in work and an explanation of techniques used to determine the amount;
- D. Building location/address, including Block and Lot numbers;
- E. Work schedule including the starting and completion dates;
- F. Abatement methods to be employed;
- G. Procedures for removal of asbestos-containing material;
- H. Name, title and authority of governmental representative sponsoring project.

1.04 WORK INCLUDED IN UNIT PRICE

The asbestos abatement contractor will be paid a basic unit price of **\$25.00** per square feet for the removal and disposal of asbestos containing material and replacement of the same with non-asbestos containing materials.

Unit price shall include all costs necessary to do the work of this Contract, including but not limited to: labor, materials, equipment, utilities, disposal, insurance, overhead and profit.



1.05 AIR MONITORING – ASBESTOS ABATEMENT CONTRACTOR

- A. “Air Sampling” shall mean the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400 or the provisional transmission electron microscopy methods developed by the USEPA and/or National Institute of Standard and Technology which are utilized for lower detectability and specific fiber identification.
- B. Air monitoring of asbestos abatement contractor’s personnel will be performed in conformance with OSHA requirements, (All costs associated with this work are deemed included in the unit price.).
- C. Qualifications of Testing Laboratory:

The industrial hygiene laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).

Note: Work area air testing and analysis before, during and upon completion of work (clearance testing) will be performed by a Third Party Air Monitor under separate Contract with the City.

1.06 THIRD PARTY MONITORING AND LABORATORY

- A. The NYCDDC, at its own expense, will employ the services of an independent Third Party Air Monitoring Firm and Laboratory. The Third Party Air Monitor will perform air sampling activities and project monitoring at the Work Site.
- B. The Laboratory will perform analysis of air samples utilizing Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM).
- C. The Third Party Air Monitoring Firm and the designated Project Monitor shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the asbestos abatement contractor to verify that said performance complies with this Specification. The Third-Party Air Monitor shall be on site throughout the entire abatement operation.
- D. The NYCDDC will be responsible for costs incurred with the Third Party Air Monitoring Firm and laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the asbestos abatement contractor.



1.07 PAYMENT REQUEST DOCUMENTATION

- A. The following information shall be included for each payment request:
1. Description of work performed.
 2. Linear footage and pipe sizes involved.
 3. Square footage for boiler & breaching insulation removed.
 4. Square footage of non pipe and boiler areas removed, patched, enclosed, sealed, or painted.
 5. Square footage of encapsulation, sealing, patching, and painting involved.
 6. Total cost associated with compliance with the assigned task.
 7. Architectural, Electrical, HVAC, Plumbing, etc. work incidental to the Asbestos Abatement Work.
 8. A certified copy (in form 4312-39) to the Comptroller or Financial Officer of the New York City to the effect that the financial statement is true.
 9. A signed copy (in form 6506q-6) of certificate of compliance with non-discriminatory provisions of the Contract.
 10. Attach a copy of valid workmen compensation insurance.
 11. Valid asbestos insurance per occurrence.
 12. General liability insurance when required.
- B. Each payment request shall include a grand total for all work completed that billing period, the landfill waste manifests and a copy of waste transporter permit. The Department of Design and Construction will inspect the work performed, review the cost and approve or disapprove requests for payment.
- C. EXPOSURE LOG: With this final payment, the asbestos abatement contractor shall submit a listing of the names and social security numbers of all employees actively engaged in the abatement work of this Contract. This list shall include a summary showing each part of the abatement work in which the employee was engaged and the dates thereof.

1.08 QUANTITY CALCULATIONS

In order to determine the square footage involved for the various pipe sizes of pipe insulation that might be encountered, the following table is to be used.



PIPE INSULATION SIZE O.D.	PIPE SIZE O.D.	SQUARE FOOTAGE PER LINEAR FOOT
2-1/2"	1/2"	0.65
2-3/4"	3/4"	0.72
3"	1"	0.79
3-1/4"	1-1/4"	0.85
3-1/2"	1-1/2"	0.92
4"	2"	1.05
4-1/2"	2-1/2"	1.18
5"	3"	1.31
6"	3-1/4"	1.57
7"	3-1/2"	1.83
8"	4"	2.09
9"	5"	2.36
10"	6"	2.62
12"	8"	3.14
14"	10"	3.67
16"	12"	4.19
18"	14"	4.71

1.09 METHOD OF PAYMENT

Payment shall be made in accordance with Items A through R below. Payment shall be calculated based on the actual quantity of the item performed by the asbestos abatement contractor, times the unit price specified below. Credits may apply to certain times, as specified below.

A. REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING PIPE INSULATION: Actual linear footage, multiplied by the square footage factor listed for the respective pipe size in Section 1.08, multiplied by the unit price in Section 1.04.

1. EXAMPLE: 100 lin.ft. of 1/2" pipe and 100 lin.ft. of 6" pipe, including elbows, tees. Flanges, etc.
2. 100 X 0.65 = 65 sq.ft. 65 x unit price = Payment
3. 100 X 2.62 = 262 sq.ft. 262 x unit price = Payment

B. REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER INSULATION: (all types including Silicate Block and including the removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.

1. EXAMPLE: Item B. removal and replacement of 1000 S.F. of boiler insulation (incl. Silicate block)
2. 1000 S.F. X (1.5) X the Unit Price = Payment



- C. **REMOVAL, DISPOSAL AND REPLACEMENT OF TANK INSULATION:** (all types including removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.
- D. **REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER UPTAKE, & BREACHING INSULATION:** (all types including stiffening angles and wire lath) Payment shall be made at 2.0 times the unit price per square foot.
- E. **REMOVAL, DISPOSAL AND REPLACEMENT OF DUCT INSULATION:** Payment shall be made at 1.0 times the unit price per square foot.
- F. **REMOVAL, DISPOSAL AND REPLACEMENT OF SOFT ASBESTOS CONTAINING MATERIAL:** (Including sprayed-on fire proofing and sound proofing) Payment shall be made at 1.0 times the unit price per square foot of surface area. Area of irregular surfaces must be calculated and confirmed with DDC representative.
- G. **ACOUSTIC PLASTER REPAIR AND/OR ENCAPSULATION:** Payment shall be made at 0.5 times the unit price per square foot.
- H. **PATCHING OR REPAIR** of items listed in A through F will be paid at 0.33 times the unit price per square foot.
- I. **REMOVAL, DISPOSAL AND REPLACEMENT OF WATERPROOFING ASBESTOS CONTAINING MATERIAL:** (including friable and non-friable waterproofing material from interior and exterior walls, floors, foundations, penetrations, louvers, vents and openings other than windows, doors and skylights) Payment shall be made at 0.5 times the unit price per square foot.
- J. **REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING ELECTRICAL WIRING INSULATION:** (including friable and non-friable wiring insulation) Payment shall be made at 0.33 times the unit price per square foot.
- K. **PAINTING:** Payment shall be made at 0.05 times the unit price per square foot.
- L. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING PLASTER:** from ceilings and walls, including any wire lath and disposal as asbestos containing waste. Payment shall be made at 0.80 times the unit price per square foot.
- M. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES, CEILING TILES, TRANSITE PANELS:** (including any adhesive, glue, mastic and/or underlayment) and disposal as asbestos containing waste. Payment shall be made at 0.40 times the unit price per square foot. If multiple layers are discovered, each additional layer shall be paid at 0.20 times the unit price per square foot.



- N. **ADDITIONAL CLEAN UP/HOUSEKEEPING OF WORK AREA:** (excluding pre-cleaning of work area required by regulations) HEPA vacuuming and wet cleaning of asbestos contaminated surface. Payment shall be made at 0.20 times the unit price per square foot. When GLOVE BAG is employed to remove ACM, cost of HEPA vacuuming and wet cleaning of floor area up to 3 feet on each side of glove-bag shall be included in unit price and no extra payment will be made.
- O. **REMOVAL, DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL:** including mastic, flashing and sealant compound and provide temporary asbestos-free roof covering consisting of one layer of rolled roofing paper sealed with asphaltic roofing compound. Payment shall be made at 0.8 times the unit price per square foot. Credit at a rate of 0.33 times the unit price will be taken for each square foot of temporary roof covering which the asbestos abatement contractor is directed not to install.
- P. **PICK-UP AND DISPOSAL OF GROSS DEBRIS:** (excluding any waste generated from abatement under Item A-R) at a rate of \$150 per cubic yard for asbestos contaminated waste and \$75 per cubic yard for non-asbestos contaminated waste. This cost includes all labor and material cost associated with work.
- Q. **REMOVAL OF ASBESTOS-CONTAINING BRICK, BLOCK, MORTAR, CEMENT OR CONCRETE:** along with all surfacing materials including wire lath and/or other supporting structures and disposal as ACM waste. Payment shall be made at a rate of \$25.00 per cubic foot of material removed.
- R. **REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING WINDOW/DOOR CAULKING:** including friable and non-friable caulking, weather-stripping, glazing, sealants or other waterproofing materials applied to windows, doors, skylights, etc. Payment shall be made at the rate of \$400.00 per opening regardless of size or configuration. This cost includes labor, consumable materials, set-up/breakdown, removal and disposal, as required.

Note 1: CREDIT: For items listed in A through F, a credit at a rate of 0.33 times the unit price, times the respective multiplier (for each item) will be taken for each square foot of insulation which the asbestos abatement contractor is not directed to reapply.

Note 2: MINIMUM PAYMENT: The minimum payment per call at any individual job sites or various job sites during the same day will be eight hundred dollars (\$800.00).

Note 3: All payments shall be made as described in paragraph 1.09 herein.

Note 4: WORKING HIGHER THAN 12 FEET ABOVE FLOOR LEVEL OR WORK REQUIRING COMPLEX SCAFFOLDING OR CONSTRUCTION WORK PLATFORMS: Provisions are made in this Contract to compensate the asbestos abatement contractor for work performed in locations that are difficult to access due to work at elevations that are significantly higher than the normal work level. The unit price for these items will be paid at 1.20 times the unit price described in Paragraphs 1.09, A through R



for those portions of the work that are more than twelve (12) feet above the grade for that would be judged as the normal working level.

1.10 GUARANTEE

- A. Work performed in compliance with each task shall be guaranteed for a period of one year from the date the completed work is accepted by the Department of Design and Construction.
- B. The Commissioner of The Department of Design and Construction will notify the asbestos abatement contractor in writing regarding defects in work under the guarantee.

1.11 OCCUPANCY OF SITE NOT EXCLUSIVE

Attention is specifically drawn to the fact that contractors, performing the work of other Contracts, may be brought upon any of the work sites of this Contract. Therefore, the asbestos abatement contractor shall not have exclusive rights to any site of his work and shall fully cooperate and coordinate his work with the work of other contractors who may be brought upon any site of the work of this Contract. This paragraph applies to those areas outside the regulated Work Area as defined by Title 15, Chapter I of RCNY.

1.12 SUBMITTALS

- A. Pre-Construction Submittals:
 - 1. Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm, facility manager and the Construction Project Manager. At this meeting, the asbestos abatement contractor shall present three copies of the following items:
 - a. asbestos abatement contractor's scope of work, work plan and schedule.
 - b. Asbestos project notifications, approved variances and plans to Government Agencies.
 - c. Copies of Permits, clearance and licenses if required.
 - d. Schedules: the asbestos abatement contractor shall provide to the Construction Project Manager a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. asbestos abatement contractor shall post a copy of all schedules at the site:



- (1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, Work Area preparation, demolition, gross removal, fine cleaning, encapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.
 - (2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.
 - (3) Submit all changes in schedule or staffing to the Construction Project Manager prior to implementation.
- e. Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number to nearest hospital) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements of These Specifications.
- f. Safety Data Sheets (SDS) for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project. No work involving the aforementioned will be allowed to proceed until SDS are reviewed.
- g. Worker Training and Medical Surveillance: The asbestos abatement contractor shall submit a list of the persons who will be employed by him /her to perform the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
- h. Logs: Specimen copies of daily progress log, visitor's log, and disposal log.
- (1) The asbestos abatement contractor shall provide a permanently bound log book of minimum 8-1/2" x 11" size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of the asbestos abatement contractor; name, address and phone number of asbestos abatement contractor and City's third party air



monitoring firm; emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved for entry into the Work Area.

- (2) All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the asbestos abatement contractor shall submit the logbook containing a day-to-day record of personnel log entries countersigned by the Construction Project Manager every day.

- i. Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of ACM, understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

B. During Construction Submittals:

1. Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.
2. Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Construction Project Manager.
3. Floor plans indicating asbestos abatement contractor's current work progress shall be submitted for review by the Construction Project Manager.
4. All asbestos abatement contractors' air monitoring and inspection results.

C. Project Closeout Submittals:

Upon completion of the project and as a condition of acceptance, the asbestos abatement contractor shall present two copies of the following items, bound and indexed:

1. Lien Waivers from asbestos abatement contractor, sub-asbestos abatement contractors and Suppliers,
2. Daily OSHA air monitoring results,



3. All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,
4. Field Sign-In/Sign-Out Logs for every shift,
5. Copies of all Building Department Forms and Permits,
6. A Letter of Compliance stating that all the work on this project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations,
7. All Warranties as stated in the Specifications,
 - a. Fully executed disposal certificates and transportation manifest.
8. Project Record: The asbestos abatement contractor shall maintain a project record for all small and large asbestos projects. During the project, the project record shall be kept on site at all times. Upon completion of the project, the project record shall be maintained by the building owner. The project record shall be submitted to DDC as part of the close out documents. The project record shall consist of:
 - a. Copies of licenses of all asbestos abatement contractors involved in the project;
 - b. Copies of NYCDEP and NYSDOL supervisor and handler certificates for all workers engaged in the project;
 - c. Copies of all project notifications and reports filed with NYCDEP, NYSDOL and USEPA for the project, with any amendments or variances;
 - d. Copies of all asbestos abatement permits, including associated approved plans and work place safety plan;
 - e. A copy of the air sampling log and all air sampling results;
 - f. A copy of the abatement asbestos abatement contractor's daily log book;
 - g. Copies of all asbestos waste manifests;
 - h. A copy of all Project Monitor's Reports (ACP-15).



- i. A copy of each ATR-1 Form completed for the asbestos project (if required).
- j. A copy of each Asbestos Project Conditional Closeout Report (ACP-20) if required.
- k. A copy of the Asbestos Project Completion Form (ACP-21).

1.13 PROTECTION OF FURNITURE AND EQUIPMENT

Cover all furniture and equipment that cannot be removed from Work Areas. Movable furniture and equipment will be removed from Work Areas by the asbestos abatement contractor prior to start of work. At the conclusion of the work (after final air testing), the asbestos abatement contractor will remove all plastic covering on walls, floors, furniture, equipment and reinstall furniture and equipment. He shall remove and store all sheaths, curtains and drapes, and reinstall same following final clean up.

1.14 UTILITIES

A. General:

All temporary facilities shall be subject to the approval of the Commissioner. Prior to starting work at any site, locations and/or sketches (if required) of temporary facilities must be submitted to the Construction Project Manager for the required approval.

B. Water:

The Department of Design and Construction will furnish all water needed for construction, at no cost to the asbestos abatement contractor in buildings under their jurisdiction. However, it is the responsibility of the asbestos abatement contractor to ensure that hot water is provided for showering in the decontamination unit. The asbestos abatement contractor shall furnish, install and maintain any needed equipment to meet these requirements at his own expense.

C. Electricity:

The Department of Design and Construction will furnish all electricity needed for construction, at no cost to the asbestos abatement contractor in a building, under their jurisdiction. The asbestos abatement contractor is responsible for routing the electric power to the abatement Work Area.

All temporary lighting and temporary electrical service for Work Area shall be in weatherproof enclosures and be ground fault protected.



- D. In leased spaces, arrangements for water supplies and electricity must be made with the landlord. However, all such arrangements must be made through and are subject to approval of the Department of Design and Construction. Utilities will be provided at no cost to the asbestos abatement contractor. However, it is the asbestos abatement contractor's (or the general contractor's) responsibility to furnish and install a suitable distribution system to the Work Area. This system will be provided at no cost to the City.

1.15 FEES

The asbestos abatement contractor shall be responsible for any and all fees or charges imposed by Local, State or Federal Law, Rule and Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the date of the Bid opening.

END OF SECTION



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**SECTION 260013 – ELECTRICAL CONTRACTOR WORK
NOVEMBER 2017 VERSION**

ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT

1.01 SCOPE FOR ASBESTOS ABATEMENT WORK

- A. The "General Conditions" apply to the work of this Section.
- B. The asbestos abatement contractor shall remove asbestos containing materials as needed to perform the other work of this Contract when discovered during the course of work. When required, the asbestos abatement contractor shall replace the ACM with non-asbestos containing materials. An allowance of **\$5,000.00** for the **Electrical Contractor** is herein established for this incidental work when so ordered and authorized by the Commissioner.
- C. All work shall be done in accordance with the applicable provisions of the rules and regulations of the asbestos control program as promulgated by Title 15 Chapter I of RCNY and New York State Department of Labor Industrial Code Rule 56 cited as 12 NYCRR Part 56, whichever is more stringent as per latest amendments to these laws and as modified herein by these specifications.
- D. All disposal of asbestos contaminated material shall be per Local Law 70/85.
- E. The asbestos abatement contractor's attention is directed to the fact that certain methods of asbestos abatement are protected by patents. To date, patents have been issued with respect to "negative pressure enclosure" or "negative-air" or "reduced pressure" and "glove bag".
- F. The asbestos abatement contractor shall be solely responsible for and shall hold the Department of Design and Construction and the City harmless from any and all damages, losses and expenses resulting from any infringement by the asbestos abatement contractor of any patent, including but not limited to the patents described above, used by the asbestos abatement contractor during performance of this agreement.
- G. "Asbestos" shall mean any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite and actinolite.
- H. Prior to starting, the asbestos abatement contractor must notify the Commissioner of the Department of Design and Construction if he/she anticipates any difficulty in performing the Work as required by these Specifications. The asbestos abatement



contractor is responsible to prepare and submit all filings, notifications, etc. required by all City, State and Federal regulatory agencies having jurisdiction.

The asbestos abatement contractor is responsible for submitting the Asbestos Project Notification Form (ACP-7 Form) to the Department of Environmental Protection, Asbestos Control Program, as per Title 15, Chapter I of RCNY and to the NYSDOL as per Industrial Code Rule 56.

The asbestos abatement contractor is responsible for preparing, and submitting Asbestos Variance Application (ACP-9). If a Variance is required, the asbestos abatement contractor is responsible to retain a NYSDOL Asbestos Project Designer, as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required variance.

The general contractor is responsible for preparing and submitting an Asbestos Abatement Permit and/or Work Place Safety Plans (WPSP) that may be required for the completion of the Contract or incidental work. If such plans are required, the general contractor is responsible for retaining a registered design professional as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required plans.

The asbestos abatement contractor is responsible for the submission of all required documents to the NYCDEP to acquire the appropriate Asbestos Project Conditional Closeout (ACP-20) and/or Asbestos Project Completion Forms (ACP-21) on a timely basis for the completion of the incidental work encountered under this contract.

The asbestos abatement contractor will be required to attend an on-site job meeting with the Construction Project Manager prior to the start of work to examine conditions and plan the sequence of operations, etc.

The asbestos abatement contractor shall have a NYSDOL/NYCDEP Asbestos Supervisor onsite to oversee the work and conduct a final visual inspection as required by both Title 15, Chapter 1 of the RCNY and NYSDOL Industrial Code Rule 56.

- I. All work shall be done during regular working hours unless the asbestos abatement contractor requests authorization to work in other than regular working hours and such authorization is granted by the Commissioner. (Regular work hours are those hours during which any given facility, in which work is to be done, is customarily open and functioning, normally between the hours of 8:00 A.M. and 4:00 P.M. Monday - Friday.) If such work schedule is authorized by the Commissioner, the work shall be done at no additional cost to the City.
- J. The Commissioner may order that work be done in other than regular working hours as herein by defined and this order may require the asbestos abatement



contractor to pay premium or overtime wages to complete the work. If the Commissioner orders work in other than regular working hours, the asbestos abatement contractor shall multiply the unit price for that portion of the work requiring premium wages by 1.50 when computing payment in accordance with Paragraph 1.09. All requests for premium payment must be supported by certified payroll sheets and field sheets approved by the Construction Project Manager.

1.02 QUALIFICATIONS OF ASBESTOS ABATEMENT CONTRACTOR

- A. Requirements: The asbestos abatement contractor must be approved through the Department's Request for Subcontractor Approval, administered by the Agency Chief Contracting Office (ACCO), Vendor Integrity Unit. The asbestos abatement contractor must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (6) below. Such documentation shall include without limitation, all required licenses, certificates, and documentation.
1. The asbestos abatement contractor must, whether an individual, corporation, partnership, joint venture or other legal entity, demonstrate for the three year period prior to the work that it has been licensed by the New York State Department of Labor (NYSDOL), as an "Asbestos Abatement Contractor". The asbestos abatement contractor shall submit copies of the asbestos abatement contractors NYSDOL License for the past three years
 2. The asbestos abatement contractor must, for the three-year period prior to the work, have been in the business of providing asbestos abatement services as a routine part of its daily operations.
 3. The asbestos abatement contractor proposing to do asbestos abatement work must be thoroughly experienced in such work and must submit a list of five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$1,000,000 in each of the three years.
 4. For each project submitted to meet the experience requirements set forth above, the asbestos abatement contractor must submit the following information for the project; name and location of the project; name title and telephone number and email address of the owner or the owner's representative who is familiar with the asbestos abatement contractor's work; brief description of the scope of work completed as a prime or sub-asbestos abatement contractor; amount of contract or subcontract and the date of completion.
 5. The asbestos abatement contractor must demonstrate that it has the financial resources, certified supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking



into consideration other business commitments. The asbestos abatement contractor must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract. The Department may also conduct an inspection of the asbestos abatement contractor's facility to verify if the contractor has equipment and staffing to perform the work.

6. The asbestos abatement contractor must submit a copy of their Corporate Health and Safety Plan for review and acceptance. A Job Hazard Analysis (JHA) for the specific work conducted must be included.
- B. Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics thereof. Provide materials or workmanship that meet or exceed the specifically named codes or standards where required by these specifications.
- C. Site Investigation: Asbestos abatement contractor shall inspect all the specifications and related drawings, and will investigate and confirm the site conditions affecting the work, including, but not limited to (1) through (5) below.
The asbestos abatement contractor will attend a walkthrough site inspection with the department's Project Manager and the Third-Party Air Monitor prior to the work. Such walkthrough will be scheduled at the Department's convenience.
1. Physical considerations and conditions of both the material and structure. These considerations include any obstacles or obstructions encountered in accessing or removing the material.
 2. Handling, storage, transportation and disposal of the material.
 3. Availability of qualified and skilled labor.
 4. Availability of utilities.
 5. Exact quantities of all materials to be disturbed and/or removed

1.03 ASBESTOS ABATEMENT CONTRACTOR RESPONSIBILITIES

The asbestos abatement contractor will visit the subject location within one (1) working day of notification to ascertain actual work required. If the project is identified as being "urgent", then work shall commence no later than 48 hours from the time of notification. In this event, the asbestos abatement contractor shall immediately notify when applicable EPA NESHAPS Coordinator, NYSDOL Asbestos Control Bureau and NYCDEP Asbestos



Control Program of start of the work and file the necessary Asbestos Notifications and any applicable Variance Applications with the regulatory agencies cited above.

In the event that the project is not classified as "urgent" the asbestos abatement contractor shall notify the EPA NESHAPS Coordinator, NYSDOL and NYCDEP by submitting the requisite asbestos project notification forms, postmarked 10 days before activity begins if 260 linear feet or more and/or 160 square feet or more of asbestos containing material will be disturbed.

The following information must be included in the notification:

- A. Name and address of building City or operator;
- B. Project description:
 - 1. Size - square feet, number of linear feet, etc;
 - 2. Age - date of construction and renovations (if known);
 - 3. Use - i.e., office, school, industrial, etc.
 - 4. Scope - repair, demolition, cleaning, etc.
- C. Amount of asbestos involved in work and an explanation of techniques used to determine the amount;
- D. Building location/address, including Block and Lot numbers;
- E. Work schedule including the starting and completion dates;
- F. Abatement methods to be employed;
- G. Procedures for removal of asbestos-containing material;
- H. Name, title and authority of governmental representative sponsoring project.

1.04 WORK INCLUDED IN UNIT PRICE

The asbestos abatement contractor will be paid a basic unit price of **\$25.00** per square feet for the removal and disposal of asbestos containing material and replacement of the same with non-asbestos containing materials.

Unit price shall include all costs necessary to do the work of this Contract, including but not limited to: labor, materials, equipment, utilities, disposal, insurance, overhead and profit.



1.05 AIR MONITORING – ASBESTOS ABATEMENT CONTRACTOR

- A. “Air Sampling” shall mean the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400 or the provisional transmission electron microscopy methods developed by the USEPA and/or National Institute of Standard and Technology which are utilized for lower detectability and specific fiber identification.
- B. Air monitoring of asbestos abatement contractor’s personnel will be performed in conformance with OSHA requirements, (All costs associated with this work are deemed included in the unit price.).
- C. Qualifications of Testing Laboratory:

The industrial hygiene laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).

Note: Work area air testing and analysis before, during and upon completion of work (clearance testing) will be performed by a Third Party Air Monitor under separate Contract with the City.

1.06 THIRD PARTY MONITORING AND LABORATORY

- A. The NYCDDC, at its own expense, will employ the services of an independent Third Party Air Monitoring Firm and Laboratory. The Third Party Air Monitor will perform air sampling activities and project monitoring at the Work Site.
- B. The Laboratory will perform analysis of air samples utilizing Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM).
- C. The Third Party Air Monitoring Firm and the designated Project Monitor shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the asbestos abatement contractor to verify that said performance complies with this Specification. The Third-Party Air Monitor shall be on site throughout the entire abatement operation.
- D. The NYCDDC will be responsible for costs incurred with the Third Party Air Monitoring Firm and laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the asbestos abatement contractor.



1.07 PAYMENT REQUEST DOCUMENTATION

- A. The following information shall be included for each payment request:
1. Description of work performed.
 2. Linear footage and pipe sizes involved.
 3. Square footage for boiler & breaching insulation removed.
 4. Square footage of non pipe and boiler areas removed, patched, enclosed, sealed, or painted.
 5. Square footage of encapsulation, sealing, patching, and painting involved.
 6. Total cost associated with compliance with the assigned task.
 7. Architectural, Electrical, HVAC, Plumbing, etc. work incidental to the Asbestos Abatement Work.
 8. A certified copy (in form 4312-39) to the Comptroller or Financial Officer of the New York City to the effect that the financial statement is true.
 9. A signed copy (in form 6506q-6) of certificate of compliance with non-discriminatory provisions of the Contract.
 10. Attach a copy of valid workmen compensation insurance.
 11. Valid asbestos insurance per occurrence.
 12. General liability insurance when required.
- B. Each payment request shall include a grand total for all work completed that billing period, the landfill waste manifests and a copy of waste transporter permit. The Department of Design and Construction will inspect the work performed, review the cost and approve or disapprove requests for payment.
- C. EXPOSURE LOG: With this final payment, the asbestos abatement contractor shall submit a listing of the names and social security numbers of all employees actively engaged in the abatement work of this Contract. This list shall include a summary showing each part of the abatement work in which the employee was engaged and the dates thereof.

1.08 QUANTITY CALCULATIONS

In order to determine the square footage involved for the various pipe sizes of pipe insulation that might be encountered, the following table is to be used.



PIPE INSULATION SIZE O.D.	PIPE SIZE O.D.	SQUARE FOOTAGE PER LINEAR FOOT
2-1/2"	1/2"	0.65
2-3/4"	3/4"	0.72
3"	1"	0.79
3-1/4"	1-1/4"	0.85
3-1/2"	1-1/2"	0.92
4"	2"	1.05
4-1/2"	2-1/2"	1.18
5"	3"	1.31
6"	3-1/4"	1.57
7"	3-1/2"	1.83
8"	4"	2.09
9"	5"	2.36
10"	6"	2.62
12"	8"	3.14
14"	10"	3.67
16"	12"	4.19
18"	14"	4.71

1.09 METHOD OF PAYMENT

Payment shall be made in accordance with Items A through R below. Payment shall be calculated based on the actual quantity of the item performed by the asbestos abatement contractor, times the unit price specified below. Credits may apply to certain times, as specified below.

A. REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING PIPE INSULATION: Actual linear footage, multiplied by the square footage factor listed for the respective pipe size in Section 1.08, multiplied by the unit price in Section 1.04.

1. EXAMPLE: 100 lin.ft. of 1/2" pipe and 100 lin.ft. of 6" pipe, including elbows, tees. Flanges, etc.
2. 100 X 0.65 = 65 sq.ft. 65 x unit price = Payment
3. 100 X 2.62 = 262 sq.ft. 262 x unit price = Payment

B. REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER INSULATION: (all types including Silicate Block and including the removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.

1. EXAMPLE: Item B. removal and replacement of 1000 S.F. of boiler insulation (incl. Silicate block)
2. 1000 S.F. X (1.5) X the Unit Price = Payment



- C. **REMOVAL, DISPOSAL AND REPLACEMENT OF TANK INSULATION:** (all types including removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.
- D. **REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER UPTAKE, & BREACHING INSULATION:** (all types including stiffening angles and wire lath) Payment shall be made at 2.0 times the unit price per square foot.
- E. **REMOVAL, DISPOSAL AND REPLACEMENT OF DUCT INSULATION:** Payment shall be made at 1.0 times the unit price per square foot.
- F. **REMOVAL, DISPOSAL AND REPLACEMENT OF SOFT ASBESTOS CONTAINING MATERIAL:** (Including sprayed-on fire proofing and sound proofing) Payment shall be made at 1.0 times the unit price per square foot of surface area. Area of irregular surfaces must be calculated and confirmed with DDC representative.
- G. **ACOUSTIC PLASTER REPAIR AND/OR ENCAPSULATION:** Payment shall be made at 0.5 times the unit price per square foot.
- H. **PATCHING OR REPAIR** of items listed in A through F will be paid at 0.33 times the unit price per square foot.
- I. **REMOVAL, DISPOSAL AND REPLACEMENT OF WATERPROOFING ASBESTOS CONTAINING MATERIAL:** (including friable and non-friable waterproofing material from interior and exterior walls, floors, foundations, penetrations, louvers, vents and openings other than windows, doors and skylights) Payment shall be made at 0.5 times the unit price per square foot.
- J. **REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING ELECTRICAL WIRING INSULATION:** (including friable and non-friable wiring insulation) Payment shall be made at 0.33 times the unit price per square foot.
- K. **PAINTING:** Payment shall be made at 0.05 times the unit price per square foot.
- L. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING PLASTER:** from ceilings and walls, including any wire lath and disposal as asbestos containing waste. Payment shall be made at 0.80 times the unit price per square foot.
- M. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES, CEILING TILES, TRANSITE PANELS:** (including any adhesive, glue, mastic and/or underlayment) and disposal as asbestos containing waste. Payment shall be made at 0.40 times the unit price per square foot. If multiple layers are discovered, each additional layer shall be paid at 0.20 times the unit price per square foot.



- N. **ADDITIONAL CLEAN UP/HOUSEKEEPING OF WORK AREA:** (excluding pre-cleaning of work area required by regulations) HEPA vacuuming and wet cleaning of asbestos contaminated surface. Payment shall be made at 0.20 times the unit price per square foot. When GLOVE BAG is employed to remove ACM, cost of HEPA vacuuming and wet cleaning of floor area up to 3 feet on each side of glove-bag shall be included in unit price and no extra payment will be made.
- O. **REMOVAL, DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL:** including mastic, flashing and sealant compound and provide temporary asbestos-free roof covering consisting of one layer of rolled roofing paper sealed with asphaltic roofing compound. Payment shall be made at 0.8 times the unit price per square foot. Credit at a rate of 0.33 times the unit price will be taken for each square foot of temporary roof covering which the asbestos abatement contractor is directed not to install.
- P. **PICK-UP AND DISPOSAL OF GROSS DEBRIS:** (excluding any waste generated from abatement under Item A-R) at a rate of \$150 per cubic yard for asbestos contaminated waste and \$75 per cubic yard for non-asbestos contaminated waste. This cost includes all labor and material cost associated with work.
- Q. **REMOVAL OF ASBESTOS-CONTAINING BRICK, BLOCK, MORTAR, CEMENT OR CONCRETE:** along with all surfacing materials including wire lath and/or other supporting structures and disposal as ACM waste. Payment shall be made at a rate of \$25.00 per cubic foot of material removed.
- R. **REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING WINDOW/DOOR CAULKING:** including friable and non-friable caulking, weather-stripping, glazing, sealants or other waterproofing materials applied to windows, doors, skylights, etc. Payment shall be made at the rate of \$400.00 per opening regardless of size or configuration. This cost includes labor, consumable materials, set-up/breakdown, removal and disposal, as required.

Note 1: CREDIT: For items listed in A through F, a credit at a rate of 0.33 times the unit price, times the respective multiplier (for each item) will be taken for each square foot of insulation which the asbestos abatement contractor is not directed to reapply.

Note 2: MINIMUM PAYMENT: The minimum payment per call at any individual job sites or various job sites during the same day will be eight hundred dollars (\$800.00).

Note 3: All payments shall be made as described in paragraph 1.09 herein.

Note 4: WORKING HIGHER THAN 12 FEET ABOVE FLOOR LEVEL OR WORK REQUIRING COMPLEX SCAFFOLDING OR CONSTRUCTION WORK PLATFORMS: Provisions are made in this Contract to compensate the asbestos abatement contractor for work performed in locations that are difficult to access due to work at elevations that are significantly higher than the normal work level. The unit price for these items will be paid at 1.20 times the unit price described in Paragraphs 1.09, A through R



for those portions of the work that are more than twelve (12) feet above the grade for that would be judged as the normal working level.

1.10 GUARANTEE

- A. Work performed in compliance with each task shall be guaranteed for a period of one year from the date the completed work is accepted by the Department of Design and Construction.
- B. The Commissioner of The Department of Design and Construction will notify the asbestos abatement contractor in writing regarding defects in work under the guarantee.

1.11 OCCUPANCY OF SITE NOT EXCLUSIVE

Attention is specifically drawn to the fact that contractors, performing the work of other Contracts, may be brought upon any of the work sites of this Contract. Therefore, the asbestos abatement contractor shall not have exclusive rights to any site of his work and shall fully cooperate and coordinate his work with the work of other contractors who may be brought upon any site of the work of this Contract. This paragraph applies to those areas outside the regulated Work Area as defined by Title 15, Chapter I of RCNY.

1.12 SUBMITTALS

- A. Pre-Construction Submittals:
 - 1. Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm, facility manager and the Construction Project Manager. At this meeting, the asbestos abatement contractor shall present three copies of the following items:
 - a. asbestos abatement contractor's scope of work, work plan and schedule.
 - b. Asbestos project notifications, approved variances and plans to Government Agencies.
 - c. Copies of Permits, clearance and licenses if required.
 - d. Schedules: the asbestos abatement contractor shall provide to the Construction Project Manager a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. asbestos abatement contractor shall post a copy of all schedules at the site:



- (1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, Work Area preparation, demolition, gross removal, fine cleaning, encapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.
 - (2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.
 - (3) Submit all changes in schedule or staffing to the Construction Project Manager prior to implementation.
- e. Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number to nearest hospital) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements of These Specifications.
- f. Safety Data Sheets (SDS) for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project. No work involving the aforementioned will be allowed to proceed until SDS are reviewed.
- g. Worker Training and Medical Surveillance: The asbestos abatement contractor shall submit a list of the persons who will be employed by him /her to perform the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
- h. Logs: Specimen copies of daily progress log, visitor's log, and disposal log.
- (1) The asbestos abatement contractor shall provide a permanently bound log book of minimum 8-1/2" x 11" size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of the asbestos abatement contractor; name, address and phone number of asbestos abatement contractor and City's third party air



monitoring firm; emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved for entry into the Work Area.

- (2) All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the asbestos abatement contractor shall submit the logbook containing a day-to-day record of personnel log entries countersigned by the Construction Project Manager every day.

- i. Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of ACM, understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

B. During Construction Submittals:

1. Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.
2. Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Construction Project Manager.
3. Floor plans indicating asbestos abatement contractor's current work progress shall be submitted for review by the Construction Project Manager.
4. All asbestos abatement contractors' air monitoring and inspection results.

C. Project Closeout Submittals:

Upon completion of the project and as a condition of acceptance, the asbestos abatement contractor shall present two copies of the following items, bound and indexed:

1. Lien Waivers from asbestos abatement contractor, sub-asbestos abatement contractors and Suppliers,
2. Daily OSHA air monitoring results,



3. All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,
4. Field Sign-In/Sign-Out Logs for every shift,
5. Copies of all Building Department Forms and Permits,
6. A Letter of Compliance stating that all the work on this project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations,
7. All Warranties as stated in the Specifications,
 - a. Fully executed disposal certificates and transportation manifest.
8. Project Record: The asbestos abatement contractor shall maintain a project record for all small and large asbestos projects. During the project, the project record shall be kept on site at all times. Upon completion of the project, the project record shall be maintained by the building owner. The project record shall be submitted to DDC as part of the close out documents. The project record shall consist of:
 - a. Copies of licenses of all asbestos abatement contractors involved in the project;
 - b. Copies of NYCDEP and NYSDOL supervisor and handler certificates for all workers engaged in the project;
 - c. Copies of all project notifications and reports filed with NYCDEP, NYSDOL and USEPA for the project, with any amendments or variances;
 - d. Copies of all asbestos abatement permits, including associated approved plans and work place safety plan;
 - e. A copy of the air sampling log and all air sampling results;
 - f. A copy of the abatement asbestos abatement contractor's daily log book;
 - g. Copies of all asbestos waste manifests;
 - h. A copy of all Project Monitor's Reports (ACP-15).



- i. A copy of each ATR-1 Form completed for the asbestos project (if required).
- j. A copy of each Asbestos Project Conditional Closeout Report (ACP-20) if required.
- k. A copy of the Asbestos Project Completion Form (ACP-21).

1.13 PROTECTION OF FURNITURE AND EQUIPMENT

Cover all furniture and equipment that cannot be removed from Work Areas. Movable furniture and equipment will be removed from Work Areas by the asbestos abatement contractor prior to start of work. At the conclusion of the work (after final air testing), the asbestos abatement contractor will remove all plastic covering on walls, floors, furniture, equipment and reinstall furniture and equipment. He shall remove and store all sheaths, curtains and drapes, and reinstall same following final clean up.

1.14 UTILITIES

A. General:

All temporary facilities shall be subject to the approval of the Commissioner. Prior to starting work at any site, locations and/or sketches (if required) of temporary facilities must be submitted to the Construction Project Manager for the required approval.

B. Water:

The Department of Design and Construction will furnish all water needed for construction, at no cost to the asbestos abatement contractor in buildings under their jurisdiction. However, it is the responsibility of the asbestos abatement contractor to ensure that hot water is provided for showering in the decontamination unit. The asbestos abatement contractor shall furnish, install and maintain any needed equipment to meet these requirements at his own expense.

C. Electricity:

The Department of Design and Construction will furnish all electricity needed for construction, at no cost to the asbestos abatement contractor in a building, under their jurisdiction. The asbestos abatement contractor is responsible for routing the electric power to the abatement Work Area.

All temporary lighting and temporary electrical service for Work Area shall be in weatherproof enclosures and be ground fault protected.



- D. In leased spaces, arrangements for water supplies and electricity must be made with the landlord. However, all such arrangements must be made through and are subject to approval of the Department of Design and Construction. Utilities will be provided at no cost to the asbestos abatement contractor. However, it is the asbestos abatement contractor's (or the general contractor's) responsibility to furnish and install a suitable distribution system to the Work Area. This system will be provided at no cost to the City.

1.15 FEES

The asbestos abatement contractor shall be responsible for any and all fees or charges imposed by Local, State or Federal Law, Rule and Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the date of the Bid opening.

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**SECTION 028213
NOVEMBER 2017 VERSION**

ASBESTOS ABATEMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The Contract Documents are as defined in the “Agreement”. The General Conditions shall apply to all Work of this Section.
- B. Work specified herein shall be the removal and disposal of Asbestos Containing Materials (ACM) and asbestos-contaminated materials from designated areas of the Tide Gate Bridge over Flushing Creek, Flushing Meadows/Corona Park, Queens, New York 11368.
- C. The following documents were reviewed and utilized to generate this abatement design specification which serves to locate and quantify the amount of ACM, and asbestos contaminated material, to be abated in support of this project.
 - 1. Set of Preliminary Design Drawings titled “Reconstruction of Tide Gate Bridge Over Flushing Creek BIN 2-27069-0 and Reconstruction of Tide Gates and Sluice Gates”, dated 04/04/19, prepared by URS Corporation.
 - 2. Asbestos survey performed by Louis Berger & Assoc., PC titled, “Final Report of Asbestos Survey Services, Tide Gate Bridge Over Flushing Creek: Reconstruction” dated 06/27/19.
- D. The phasing and scheduling of work for this project shall be coordinated with and approved by the Construction Project Manager and Facility Manager. The Construction Project Manager and Facility Manager will make the final determination on all issues under this Contract covered by this Specification.

1.02 SCOPE OF WORK

- A. The asbestos abatement contractor is to provide all labor, materials, equipment, services, testing, appurtenances, permits and agreements necessary to perform the work required for the abatement of ACM as required by these contract documents. All work shall be performed in accordance with this Specification, EPA regulations, OSHA regulations, New York City Local Law 70, Title 15, Chapter 1 RCNY, New York State Industrial Code 56, NIOSH recommendations, and any other applicable federal, state or local government regulations. Whenever there is a conflict or overlap of the above references, the most stringent provisions are applicable.



- B. The intent of this Specification section is to ensure that the asbestos abatement contractor is responsible for the following:
1. Abatement of all ACM.
 2. Cleaning and decontamination of the entire affected area.
 3. Demolition that may be required to access ACM in each area, Asbestos abatement contractor shall dispose of all debris associated with demolition activities as ACM waste.
 4. Removal and disposal of all ACM found within these areas such as textured paint on parapet wall, parapet expansion joint caulk, parapet base tar, etc.
 5. Provide all scaffolding, platform installation, equipment, tools, transportation and any other equipment required and/or necessary to complete all work described in the Contract Documents.
 6. The Asbestos abatement contractor shall be responsible for and shall include any and all fees or charges imposed by Local, State or Federal Law, Rule or Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the work.
 7. Prior to destructive demolition activities, the DDC may elect to collect bulk samples of assumed asbestos-containing materials and analyze the bulk samples for asbestos content.
- C. The Asbestos abatement contractor shall perform the following work as described below and indicated on the drawings. The drawings are only a diagrammatic representation of the Work Areas and do not constitute the actual quantities of material. Asbestos abatement contractor is responsible for the confirmation of the actual total quantities of the Work.

1. Drawing H002.00: Existing Bridge Plan

- a. Remove and dispose of asbestos-containing textured paint on parapet wall (beige), parapet expansion joint caulking (beige), and parapet base tar (black) within **Work Area 1**. Asbestos-containing textured paint on parapet wall (beige), parapet expansion joint caulking (beige), and parapet base tar (black) shall be removed utilizing NYCDEP 15, 1-109 Vertical Exterior Surface Procedure Removal.



Work Area	Removal Procedure	Approximate Square Feet (Sq. Ft.)	Approximate Linear Feet (Ln. Ft.)
1	NYCDEP Title 15, Chapter 1 §1-109 Vertical Exterior Surface Procedure Removal.	3,500 Sq. Ft. of Textured Paint on Parapet Wall (Beige)	–
		100 Ln. Ft. Parapet Expansion Joint Caulking (Beige)	–
		50 Sq. Ft. Parapet Base Tar (Black)	–

- D. The facility is under the jurisdiction of the New York City Department of Parks and Recreation. The asbestos abatement contractor shall perform the work of this contract in a manner that will be least disruptive to the normal use of the building.
- E. Asbestos abatement contractor's attention is directed to the fact that patents cover certain methods of asbestos abatement indicated in the specifications. To date, patents have been issued with regard to negative pressure enclosures or negative or reduced pressure and glove-bag.
- F. Asbestos abatement contractor shall be solely responsible for and shall hold the City of New York Department of Design and Construction and the City harmless from, any and all damages, losses and expenses resulting from any infringement by Asbestos abatement contractor of any patent, including but not limited to the patents described above, used by Asbestos abatement contractor during performance of this agreement.
- G. Prior to starting, the asbestos abatement contractor must notify the Commissioner of the City of New York Department of Design and Construction if he anticipates any difficulty in performing the work as directed and required by these Specifications. Asbestos abatement contractor shall be required to attend an on-site job meeting with the Construction Project Manager prior to start of work to examine conditions of the site for removal and plan the sequence for removal operations.
- H. The asbestos abatement contractor shall retain a certified Project Designer for the preparation of an Asbestos Variance Application (ACP-9), if required.
- I. The asbestos abatement contractor shall be responsible for preparing and submitting all filings, notifications, amendments and variances, etc. required by all City, State and Federal regulatory agencies having jurisdiction, at no additional cost to the NYC DDC.



- J. The general contractor shall retain a Registered Design Professional (person licensed and registered to practice the professions of architecture or engineering under the Education Law of the State of New York) to prepare a Work Place Safety Plan (WPSP), if required.
- K. The general contractor shall retain a Registered Design Professional (person licensed and registered to practice the professions of architecture or engineering under the Education Law of the State of New York) to perform final inspections required pursuant to Title 28 of the Administrative Code, including but not limited to special inspections required under Chapter 17 of the Building Code. Such special inspections and A-TR1 forms shall be completed by the Registered Design professional.
- L. For coordination with other Asbestos abatement contractors, see the General Conditions governing all Contracts.
- M. Related Asbestos Removal Work Under Other Contracts:
 - 1. Each asbestos abatement contractor shall be responsible for the removal of incidental asbestos not identified in this section and found prior to or during the Work.
 - 2. Incidental asbestos is defined as ACM that is discovered during the course of their work that must be abated to enable them to perform the work of their Contract.
- N. Work Hours:
 - 1. The asbestos abatement contractor shall establish his work schedule in a way that avoids interference or conflict with the normal functioning of the facility. Work in the evenings shall be done at no additional cost to the City.
 - 2. All work shall be done during regular working hours unless the Asbestos abatement contractor requests authorization to work other than regular working hours and such authorization is granted by the Commissioner (Regular working hours are those during which any given facility in which work is to be done is customarily open and functioning). If such work schedule is authorized by the Commissioner the work shall be done at no additional cost to the City.
 - 3. The order of phases and start dates associated with each will be determined by the Construction Project Manager.
 - 4. Asbestos abatement contractor shall be required to schedule waste transfer during evening hours, when activity within the facility is at a minimum.



Evening hours are defined as 6:00 p.m. to 6:00 a.m. Waste transfer must be approved by the Construction Project Manager and Facility Manager.

- O. The following conditions shall apply to all temporary shutdowns of existing services:
 - 1. All temporary lighting and temporary electrical services for use in the Work Area shall be in weather proof enclosures and be ground fault protected and:
 - 2. Shall be performed at no additional charge to the City.
 - 3. Shall be performed at times not interfering with the other activities in the building.
 - 4. Shall be performed only with written consent from the Commissioner and the Facility Manager.
 - 5. Shall be made through written request to the Commissioner at least 10 days in advance with complete written description of the work to be performed.

- P. Stages of Asbestos Removal Work:
 - 1. The asbestos abatement contractor will be required to perform the work and it is the intent of this Specification to remove all asbestos containing and asbestos contaminated materials from the Work Area. The asbestos abatement contractor is responsible for verifying all quantities of materials listed.

- Q. Certain equipment in the Work Area may need to remain operational during removal. Therefore, the removal of ACM from this equipment shall be performed as the last removal activities within the Work Area. The Asbestos abatement contractor shall coordinate the scheduling for the removal of ACM on functioning equipment with the Construction Project Manager.

1.03 QUALIFICATIONS OF ASBESTOS ABATEMENT CONTRACTOR

- A. Requirements: The asbestos abatement contractor must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (5) below. The asbestos abatement contractor must submit documentation demonstrating compliance with all listed requirements. Such documentation shall include without limitation, all required licenses, certificates, and documentation.
 - 1. The asbestos abatement contractor must, whether an individual, corporation, partnership, joint venture or other legal entity, demonstrate for the three year period prior to the work, that it has been licensed by the New York State Department of Labor, as an “Asbestos Abatement Contractor”.



2. The asbestos abatement contractor must, for the three year period prior to the work, have been in the business of providing asbestos abatement services as a routine part of its daily operations.
 3. The asbestos abatement contractor proposing to do asbestos abatement work must be thoroughly experienced in such work and must provide evidence of having successfully performed and completed in a timely fashion at least five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$1,000,000 in each of the three years.
 4. For each project submitted to meet the experience requirements set forth above, the asbestos abatement contractor must submit the following information for the project; name and location of the project; name title and telephone number of the owner or the owner's representative who is familiar with the asbestos abatement contractor's work; brief description of the work completed as a prime or sub-asbestos abatement contractor; amount of contract or subcontract and the date of completion.
 5. The asbestos abatement contractor must demonstrate that it has the financial resources, supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking into consideration other business commitments. The asbestos abatement contractor must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract.
- B. Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics thereof. Provide materials or workmanship that meet or exceed the specifically named codes or standards where required by these specifications.
- C. Site Investigation: Asbestos abatement contractor shall inspect all the specifications and related drawings, and will investigate and confirm the site conditions affecting the work, including, but not limited to:
1. Physical considerations and conditions of both the material and structure. These considerations include any obstacles or obstructions encountered in accessing or removing the material.
 2. Handling, storage, transportation and disposal of the material.
 3. Availability of qualified and skilled labor.



4. Availability of utilities.
5. Exact quantities of all materials to be disturbed and/or removed.

1.04 WORK BY OTHERS

The City reserves the right during the term of this Contract to have work performed on asbestos abatement projects by other asbestos abatement contractors as the situation warrants.

1.05 DEFINITIONS

- A. General Explanation: Certain terms used in this Specification Section are defined below. Definitions and explanations of this Specification Section are not necessarily complete or exclusive, but are general for the Work to the extent they are not stated more explicitly in another element of the Contract Documents.
- B. Definitions in General Use:
 1. Approve: Where used in conjunction with Engineer's response to submittals, requests, applications, inquiries, reports and claims by Asbestos abatement contractor, the meaning of term "approved" will be held to limitations of Engineer's responsibilities and duties as specified in Contract Documents. In no case will "approval" by Engineer be interpreted as a release of Asbestos abatement contractor from responsibilities to fulfill requirements of Contract Documents.
 2. Directed, Requested, etc.: Where not otherwise explained, terms such as "directed," "requested," "authorized," "selected," "approved," "required," "accepted," and "permitted" mean "directed by Engineer," "requested by Engineer," and similar phrases. However, no such implied meaning will be interpreted to extend Engineer's responsibility into Asbestos abatement contractor's responsibility for construction supervision.
 3. Furnish: Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.
 4. Indicated: The term "indicated" is a cross-reference to graphic representations, notes or schedules on Drawings, to other paragraphs or schedules in the Specifications, and to similar means of recording requirements in Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for



purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.

5. **Install:** Except as otherwise defined in greater detail, term "install" is used to describe operations at Project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.
6. **Installer:** The term "installer" is defined as the entity (person or firm) engaged by the asbestos abatement contractor, or its sub-asbestos abatement contractor for performance of a particular unit of work at Project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (installers) be expert in operations they are engaged to perform.
7. **Provide:** Except as otherwise defined in greater detail, term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.
8. **Third-Party Air Monitor:** The term "Third-Party Air Monitor" is defined as an entity engaged by City and Construction Project Manager to perform specific inspections or tests of the work, either at Project site or elsewhere; and to report and (if required) interpret results of those inspections or tests.

C. Definitions Relative to Asbestos Abatement:

1. **Abatement:** Any and all procedures physically taken to control fiber release from asbestos-containing materials. This includes removal, encapsulation, enclosure, cleanup and repair.
2. **Adequately Wet:** The complete penetration of a material with amended water to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then the material has not been adequately wetted. However, the absence of visible emissions is not evidence of being adequately wet. ACM must be fully penetrated with the wetting agent in order to be considered adequately wet. If the ACM being abated is resistant to amended water penetration, wetting agent shall be applied to the material prior to and during removal as necessary to minimize fiber release.
3. **Aggressive Sampling:** Method of sampling in which the individual collecting the air sample creates activity by the use of mechanical equipment during the sampling period to stir up settled dust and simulate activity in that area of the building.



4. AHERA: Asbestos Hazard Emergency Response Act of 1986
5. AIHA: American Industrial Hygiene Association.
6. Airlock: System for permitting entrance and exit while restricting air movement between a contaminated area and an uncontaminated area. It consists of two curtained doorways separated by a distance of at least three feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.
7. Air Sampling: Process of measuring the fiber content of a known volume of air collected during a specific period. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400, or the provisional transmission electron microscopy methods developed by the US EPA which is utilized for lower detection levels and specific fiber identification.
8. Ambient Air Monitoring: “Ambient air monitoring” shall mean measurement or determination of airborne asbestos fiber concentrations outside but in the general vicinity of the worksite.
9. Amended Water: Water to which a surfactant has been added.
10. ANSI: American National Standards Institute
11. Area Air Sampling: Any form of air sampling or monitoring where the sampling device is placed at some stationary location.
12. Asbestos: Any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtonite-grunerite), crastmoxidolite (riebeckite), tremolite, anthophyllite and actinolite.
13. Asbestos-Containing Material (ACM): Asbestos or any material containing more than one-percent asbestos.
14. Asbestos-Containing Waste Material: ACM, asbestos-contaminated objects or debris associated with asbestos abatement requiring disposal.
15. Asbestos-Contaminated Objects: Any objects which have been contaminated by asbestos or asbestos-containing material.
16. Asbestos Assessment Report: “Asbestos Assessment Report” shall mean the “Form ACP-5” form, as approved by NYCDEP, by which a NYCDEP-



certified asbestos investigator certifies that a building or structure (or portion thereof) is free of ACM or the amount of ACM to be abated constitutes a minor project.

17. **Asbestos Handler:** Individual who disturbs, removes, repairs, or encloses asbestos material. This individual shall have completed approved training course(s) and be in possession of certification issued by NYCDEP and NYSDOL.
18. **Asbestos Handler Supervisor:** Individual who supervises the handlers during an asbestos project and ensures that proper asbestos abatement procedures as well as individual safety procedures are being adhered to. This individual shall have completed approved training course(s) and be in possession of certification issued by NYCDEP and NYSDOL.
19. **Asbestos Investigator:** An individual certified by NYCDEP as having successfully demonstrated his or her ability to identify the presence of and evaluate the condition of asbestos in a building or structure.
20. **Asbestos Project:** Any form of work performed in a building or structure which will disturb (e.g., remove, enclose, encapsulate) asbestos-containing material.
21. **ASTM:** American Society for Testing and Materials.
22. **Asbestos Project Notification:** The “Form ACP-7” asbestos project notification form as approved by DEP.
23. **Authorized Visitor:** Authorized visitor shall mean the building owner and his/her representative, and any representative of a regulatory or other agency having jurisdiction over the project.
24. **Building Owner:** Person in whom legal title to the premises is vested unless the premises are held in land trust, in which instance Building Owner means the person in whom beneficial title is vested.
25. **Building Materials:** Any and all manmade materials, including but not limited to interior and exterior finishes, equipment, bricks, mortar, concrete, plaster, roofing, flooring, caulking, sealants, tiles, insulation, and outdoor paving such as sidewalks, paving tiles and asphalt.
26. **Certified Industrial Hygienist (CIH):** Individual with a minimum of five years experience as an industrial hygienist and who has successfully completed both levels of the examination administered by the American Board of Industrial Hygiene and who is currently certified by that board.



27. Certified Safety Professional (CSP): Individual having a bachelor's degree from an accredited college or university and a minimum of four years experience as a safety professional and who has successfully completed both levels of the examination administered by the Board of Certified Safety Professionals and who is currently certified by that board.
28. Chain of Custody: "Chain of Custody" shall mean the form or set of forms that document the collection and transfer of a sample.
29. City: City of New York
30. Clean Room: An uncontaminated area or room that is part of worker decontamination enclosure system with provisions for storage of workers' street clothes and protective equipment.
31. Clearance Air Monitoring: Employment of aggressive sampling techniques with a volume of air collected to determine the airborne concentration of residual fibers and shall be performed as the final abatement activity.
32. Commissioner: shall mean the head of the Agency that has entered into this contract or his/her duly authorized representative.
33. Competent Person: Shall mean the designated person as defined by OSHA in 29 CFR1926.1101.
34. Curtained Doorway: Device that consists of at least three overlapping sheets of fire retardant plastic over an existing or temporarily framed doorway. One sheet shall be secured at the top and left side, the second sheet at the top and right side, and the third sheet at the top and left side. All sheets shall have weights attached to the bottom to ensure that the sheets hang straight and maintain a seal over the doorway when not in use.
35. Decontamination Enclosure System: Series of connected rooms, separated from the Work Area and from each other by air locks, for the decontamination of workers, materials, waste containers, and equipment.
36. Demolition: The dismantling or razing of a building, including all operations incidental thereto (except for asbestos abatement activities), for which a demolition permit from the New York City Department of Buildings is required.
37. NYCDEP or DEP: The New York City Department of Environmental Protection.



38. Disturb: Any action taken which may alter, change, or stir, such as but not limited to the removal, encapsulation, enclosure or repair of asbestos-containing material.
39. DOB: The New York City Department of Buildings.
40. Egress: A continuous and unobstructed path of vertical and horizontal egress travel from any occupied portion of a building or structure to a public way. A means of egress consists of three separate and distinct parts: the exit access, the exit and the exit discharge.
41. ELAP: Environmental Laboratory Approval Program administered by the New York State Department of Health.
42. Encapsulant (sealant) or Encapsulating Agent: Liquid material which can be applied to ACM and which temporarily controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). A thin coat of lockdown encapsulant shall be applied to all surfaces in the work area which were not the subject of removal or abatement, including the cleaned layer of the surface barriers, but excepting sprinklers, standpipes, and other active elements of the fire suppression system.
43. Encapsulation: The coating or spraying of asbestos-containing material encapsulant. A thin coat of lockdown encapsulant shall be applied to all surfaces in the work area which were not the subject of removal or abatement, including the cleaned layer of the surface barriers, but excepting sprinklers, standpipes, and other active elements of the fire suppression system.
44. Enclosure: Construction of airtight walls and/or ceilings between ACM and the facility environment, or around surfaces coated with ACM, or any other appropriate procedure as determined by the NYCDEP which prevents the release of asbestos fibers.
45. EPA or USEPA: United States Environmental Protection Agency.
46. Equipment Room: Contaminated area or room that is part of the worker decontamination enclosure system with provisions for the storage of contaminated clothing and equipment.
47. Exit: That portion of a means of egress system which is separated from other interior spaces of a building or structure by fire-resistance-rated construction



- to provide a protected path of egress travel between the exit access and the exit discharge.
48. FDNY: The Fire Department of the City of New York.
 49. Fiber: An acicular single crystal or a similarity elongated polycrystalline aggregate which displays some resemblance to organic fibers by having such properties as flexibility, high aspect ratio, silky luster, axial lineation, and others, and which has attained its shape primarily through growth rather than cleavage.
 50. Fixed Object: A unit of equipment, furniture, or other item in the work area which cannot be removed from the work area. Fixed objects shall include equipment, furniture, or other items that are attached, in whole or in part, to a floor, ceiling, wall, or other building structure or system or to another fixed object and cannot be reasonably removed from the work area. Fixed objects shall also include pipes and other equipment inside the work area which are not the subject of the asbestos project. Active fire suppression system components shall not be considered fixed objects.
 51. Glovebag technique: shall mean a method for removing asbestos-containing material from heating, ventilation and air conditioning (HVAC) ducts, short piping runs, valves, joints, elbows, and other nonplanar surfaces. The glovebag assembly is a manufactured device consisting of a large bag (constructed of at least 6-mil transparent plastic), two inward-projecting long sleeve gloves, one inward-projecting waterwand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process.
 52. HEPA-Filter: High efficiency particulate air filter capable of trapping and retaining 99.97 percent of particles (asbestos fibers) greater than 0.3 micrometers mass median aerodynamic equivalent diameter.
 53. HEPA vacuum equipment: "HEPA vacuum equipment" shall mean vacuuming equipment with a HEPA filter.
 54. Holding Area: Chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.
 55. Homogeneous Work Area: Portion of the Work Area that contains one type of ACM and/or where one type of abatement is used.



56. Industrial Hygiene: Science and art devoted to the recognition, evaluation, and control of those environmental factors or stresses, arising in or from the work place, which may cause sickness, impaired health and well being, or significant discomfort and inefficiency among worker or among the citizens of the community.
57. Industrial Hygienist: Individual having a college or university degree or degrees in Engineering, Chemistry, Physics or Medicine, or related Biological Sciences who, by virtue of special studies and training, has acquired competence in industrial hygiene. Such special studies and training must have been sufficient in all of the above cognate sciences to provide the abilities:
 - a. To recognize the environmental factors and to understand their effect on people and their well being; and
 - b. To evaluate, on the basis of experience and with the aid of quantitative measurement techniques, the magnitude of these stresses in terms of ability to impair people's health and well being; and
 - c. To prescribe methods to eliminate, control, or reduce such stresses when necessary to alleviate their efforts.
58. Isolation Barrier: The construction of partitions, the placement of solid materials, and the plasticizing of apertures to seal off the work place from surrounding areas and to contain asbestos fibers in the work area.
59. Large Asbestos Project: Asbestos project involving the disturbances (e.g., removal, enclosure, encapsulation) of 260 linear feet or more of ACM or 160 square feet or more of ACM.
60. Log: An official record of all activities that occurred during the project. At a minimum, the log shall identify the building owner, agent, asbestos abatement contractor, and workers, and other pertinent information including daily activities, cleanings and waste transfers, names and certificate numbers of asbestos handler supervisors and asbestos handlers; results of inspections of decontamination systems, barriers, and negative pressure ventilation equipment; summary of corrective actions and repairs; work stoppages with reason for stoppage; manometer readings at least twice per work shift; daily checks of emergency and fire exits and any unusual events.
61. Minor Project: A project involving the disturbance (e.g., removal, enclosure, encapsulation, repair) of 25 linear feet or less of asbestos containing material or 10 square feet or less of asbestos containing material.



62. Movable Object: Unit of equipment or furniture in the Work Area that can be removed from the Work Area.
63. Negative Air Pressure Equipment: Portable local exhaust system equipped with HEPA filtration. The system shall be capable of creating a negative pressure differential between the outside and inside of the Work Area.
64. NESHAPS: National Emission Standards for Hazardous Air Pollutants.
65. NFPA: The National Fire Protection Association.
66. NIOSH: National Institute for Occupational Safety and Health.
67. DEP or NYCDEP: New York City Department of Environmental Protection
68. NYSDOL: New York State Department of Labor.
69. NYSDOL ICR 56: "NYSDOL ICR 56" shall mean Part 56 of the Official Compilation of Codes, Rules and Regulations of the State of New York or 12 NYCRR Part 56.
70. NYSDOH: The New York State Department of Health.
71. Obstruction: The blocking of a means of egress with any temporary structure or barrier. A double layer of fire-retardant 6-mil polyethylene sheeting shall not be considered an obstruction when it is prominently marked as an exit with photo luminescent signage or paint and cutting tools (knife, razor) are attached to the work area side of the sheeting for use in the event that the sheeting must be cut to permit egress. A corridor shall not be considered obstructed when there is a clear path measuring at least three (3) feet wide.
72. Occupied Area: Area of the work site where abatement is not taking place and where personnel or occupants normally function or where workers are not required to use personal protective equipment.
73. OSHA: Occupational Safety and Health Administration.
74. Outside air: "Outside air" shall mean the air outside the work place.
75. Person: Individual, partnership, company, corporation, association, firm, organization, governmental agency, administration, or department, or any other group of individuals, or any officer or employee thereof.



76. **Personal Air Monitoring:** Method used to determine employees' exposure to airborne asbestos fibers. The sample is collected outside the respirator in the worker's breathing zone.
77. **Personal Protective Equipment (PPE):** Appropriate protective clothing, gloves, eye protection, footwear, and head gear.
78. **Phase Contrast Microscopy (PCM):** The measurement protocol for the assessment of the fiber content of air. (NIOSH Method 7400).
79. **Physician:** Person licensed or otherwise authorized under Article 131 Section 65.22 of the New York State Education Law.
80. **Plasticize:** To cover floors and walls with fire retardant plastic sheeting as herein specified or by using spray plastics as acceptable to the Department.
81. **Polarized Light Microscopy (PLM):** The measurement protocol for the assessment of the asbestos content of bulk materials. (Interim Method for the Determination of Asbestiform Materials in Bulk Insulation Samples- 40 CFR Part 763, Subpart F, Appendix A as amended on September 1, 1982)
82. **Project Designer:** A person who holds a valid Project Designer Certificate issued by the New York State Department of Labor.
83. **Project Monitor:** A person who holds a valid Project Monitor Certificate issued by the New York State Department of Labor.
84. **Qualitative Fit Test:** Individual test subject's responding (either voluntarily or involuntarily) to a chemical challenge outside the respirator face-piece. Acceptable methods include irritant smoke test, odorous vapor test, and taste test.
85. **Quantitative Fit Test:** Exposing the respiratory wearer to a test atmosphere containing an easily detectable, nontoxic aerosol, vapor or gas as the test agent. Instrumentation, which samples the test atmosphere and the air inside the face-piece of the respirator, is used to measure quantitatively the leakage into the respirator. There are a number of test atmospheres, test agents, and exercises to perform during the test.
86. **Registered Design Professional:** A person licensed and registered to practice the professions of architecture or engineering under the Education Law of the State of New York.



87. Removal: Stripping of any asbestos- containing materials from surfaces or components of a facility or taking out structural components in accordance with 40 CFR 61 Subparts A and M.
88. Renovation: An addition or alteration or change or modification of a building or the service equipment thereof, that is not classified as an ordinary repair as defined in §27-125 of the Administrative Code of the City of New York.
89. Repair: Corrective action using specified work practices (e.g., glovebag, plastic tent procedures, etc.) to minimize the likelihood of fiber release from minimally damaged areas of ACM.
90. Replacement material: Any material used to replace ACM that contains less than .01 percent asbestos.
91. Shift: A worker's, or simultaneous group of workers', complete daily term of work.
92. Shower Room: Room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water controllable at the tap and arranged for complete showering during decontamination.
93. Small Asbestos Project: Asbestos project involving the disturbance (e.g., removal, enclosure, encapsulation) of more than 25 and less than 260 linear feet of ACM or more than ten and less than 160 square feet of ACM.
94. Staging Area: Work Area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the Work Area.
95. Strip: To remove asbestos materials from any part of the facility.
96. Structural Member: Load-supporting member of a facility, such as beams and load-supporting walls, or any non-load-supporting member, such as ceiling and non-load-supporting walls.
97. Surface barriers: The plasticizing of walls, floors, and fixed objects within the work area to prevent contamination from subsequent work.
98. Surfactant: Chemical wetting agent added to water to improve penetration.
99. Transmission Electron Microscopy (TEM): The measurement protocol for the assessment of the asbestos fiber content of air. Interim Transmission Electron Microscopy Analytical Methods-40 CFR Part 763, Subpart E, Appendix A.



100. Visible Emissions: Emissions containing particulate material that are visually detectable without the aid of instruments.
101. Washroom: Room between the Work Area and the holding area in the equipment decontamination enclosure system where equipment and waste containers are wet cleaned and/or HEPA-vacuumed prior to disposal.
102. Waste decontamination enclosure system: “Waste decontamination enclosure system” shall mean the decontamination enclosure system designated for the controlled transfer of materials and equipment, consisting of a washroom and a holding area.
103. Wet Cleaning: “Wet cleaning” shall mean the removal of asbestos fibers from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water.
104. Wet methods: “Wet methods” shall mean the use of amended water or removal encapsulants to minimize the generation of fibers during ACM disturbance.
105. Work Area: Designated rooms, spaces, or areas of the building or structure where asbestos abatement activities take(s) place.
106. Worker Decontamination Enclosure System: Portion of a decontamination enclosure system designed for controlled passage of workers and authorized visitors, consisting of a clean room, a shower room, and an equipment room separated from each other and from the Work Area by airlocks and curtained doorways.
107. Work Place: The work area and the decontamination enclosure system(s).
108. Work Place Safety Plan: Construction documents prepared by a registered design professional and submitted for review by DEP in order to obtain an asbestos abatement permit. Such plan shall include, but not be limited to, plans, sections, and details of the work area clearly showing the extent, sequence, and means and methods by which the work is to be performed.
109. Work Site: Premises where abatement activity is being performed. May be composed of one or more Work Areas.



1.06 STANDARD OPERATING PROCEDURES

- A. Develop and implement a written standard procedure for abatement work to ensure maximum protection and safeguard from asbestos exposure of the workers, visitors, employees, public, and environment.

B. TELEPHONE DEVICE

The asbestos abatement contractor or his authorized representative shall, at all times during the normal workday or during periods of overtime work under this Contract, carry a mobile telephone. He/she shall supply the Department of Design and Construction with the phone number for the device and he/she is liable to respond back to the calls from DDC within the next one (1) hour period after he/she receives calls from DDC. The cost to the asbestos abatement contractor for this device and all charges accruing thereto is deemed included in the work.

- C. The standard operating procedure shall ensure:

1. Tight security from unauthorized entry into the workspace.
2. Restriction of asbestos abatement contractor's personnel to the immediate Work Area and access/egress routes.
3. Donning of proper protective clothing and respiratory protection prior to entering the Work Area.
4. Safe work practices in the work place, including provisions for inter-room communications, exclusion of eating, drinking, smoking, or in any way breaking the respiratory protection.
5. Proper exit practices from the work space to the outside through the showering and decontamination facilities.
6. Removing asbestos in a way that minimizes release of fibers.
7. Packing, labeling, loading, transporting, and disposing of contaminated material in a way that minimizes exposure and contamination.
8. Emergency evacuation procedures, for medical or safety situations, to minimize the potential exposure to airborne asbestos fibers for emergency personnel, building occupants, and building environment.
9. Safety from accidents in the workspace, especially from electrical shocks, fall hazards associated with scaffolding, slippery surfaces, and entanglements in loose hoses and equipment.



10. Provisions for effective supervision, air monitoring and personnel monitoring for exposure during the work.
 11. Engineering controls that minimize exposure to fibers within the workspace.
 12. The asbestos abatement contractor shall provide a 24-hour fire watch throughout the entire term of the project, to protect against fire and unauthorized entry into the workspace. Fire watch shall be performed by an individual who is a certified asbestos worker capable of entering the Work Area for regular inspections.
- D. Provide an Asbestos Handler Supervisor to provide continuous supervision of all work, and to be responsible for the following:
1. Ensure that individuals are using proper personal protective equipment, are trained in its use and hold valid NYCDEP and NYSDOL Asbestos Handler certificates
 2. Maintain entry log records and ensure that they are recorded in accordance with the provisions of Title 15, Chapter 1 of RCNY and NYSDOL ICR 56.
 3. Surveillance of the Work Areas at a minimum of once per work shift or as required by Title 15, Chapter 1 of RCNY and NYSDOL ICR 56 -7.3, to ensure the integrity of work place isolation, negative pressure equipment and workers personal protective equipment is not torn or ripped and that respiratory protection is worn at all times.
 4. Ensure that sufficient personal protective equipment is stored in the clean room.
 5. Take precautions to prevent heat stress. Precautions include, but are not limited to, selecting lightweight protective clothing, reducing the work rate, and providing adequate fluid breaks.
 6. Perform work area inspection with project monitor prior to the commencement of final clearance air monitoring.
 7. The asbestos abatement contractor shall retain the asbestos handler supervisor to perform a visual inspection prior to the post-abatement clearance air monitoring to confirm that all containerized waste has been removed from work and holding areas and there is no visible ACM debris or residue on or about all abated surfaces.



E. ENGINEERING CONTROLS

1. The 8-hour time weighted average airborne concentration of fibers to which any passerby may be exposed shall not exceed 0.01 fibers per cubic centimeter of air when fibers have a physical dimension longer than 5 micrometers as determined by the method prescribed in these Specifications.
2. All asbestos projects shall utilize negative pressure ventilation equipment.
 - a. The asbestos abatement contractor shall use a manometer to document the pressure differential. The asbestos abatement contractor shall install and make the manometer operational once the negative pressure has been established in the work area. Magnahelic manometers shall be calibrated at least every six months and a copy of the current calibration certification shall be available at the work site.
3. Negative pressure ventilation equipment shall be installed and operated to provide at least one air change in the work area every 15 minutes. Where there are no floor or wall barriers because floor or wall material is being abated, there shall be at least one air change in the work area every ten minutes.
4. The negative pressure ventilation equipment shall operate continuously, 24 hours a day, from the establishment of isolation barriers through successful clearance air monitoring. If such equipment shuts off, adjacent areas shall be monitored for asbestos fibers.
5. A static negative air pressure of 0.02 inches (minimum) water column shall be maintained at all times in the work place during abatement to ensure that contaminated air in the Work Area does not filter back to uncontaminated areas.
6. If the contaminated area of an asbestos project covers the entire floor of the affected building, or an area greater than 15,000 square feet on any given floor, the installation of a negative air cut off switch or switches shall be required at a single location outside the work place, such as inside a stairwell, or at a secured location in the ground floor lobby when conditions warrant. The required switch or switches shall be installed by a licensed electrician pursuant to a permit issued by the Department of Buildings. If negative pressure ventilation equipment is used on multiple floors, the cut off switch shall be able to turn off the equipment on all floors.
7. On loss of negative pressure or electric power to the negative pressure ventilating units, abatement shall stop immediately and shall not resume until



power is restored and negative pressure ventilation equipment is operating again.

8. Negative pressure ventilation equipment shall be exhausted to the outside of the building away from occupied areas.
 - a. All openings (including but not limited to operable windows, doors, vents, air intakes or exhausts of any mechanical devices) less than 15 feet from the exterior exhaust duct termination location shall be plasticized with two layers of fire retardant 6-mil polyethylene sheeting, or a second negative pressure ventilation unit with the primary unit's capacity shall be connected in series prior to exhausting to the outside.
 - b. Negative pressure ventilation equipment shall exhaust away from areas accessible to the public.
 - c. All ducting shall be sealed and braced or supported to maintain airtight joints. Ducts shall be reinforced and shall be installed so as to prevent breakage. Damage to ducts must be repaired immediately.
9. Where ducting to the outside is not possible, a second negative pressure ventilation unit compatible with the primary unit's capacity shall be connected in series. The area receiving the exhaust shall have sufficient, non-recycling exhaust capacity to the outside of the structure.
10. In the event that there is a failure of the containment system or a breach in the Isolation Barriers, all abatement work will cease and the asbestos abatement contractor will immediately correct the condition. Abatement work will not resume until the Work Area has been smoke tested by the third party laboratory and approved by the Construction Project Manager.

F. LOCKDOWN ENCAPSULATION PROCEDURES

1. The following procedures shall be followed to seal in non-visible residue while conducting lockdown encapsulation on all surfaces from which ACM has not been removed:
 - a. Only encapsulants rated as acceptable or marginally acceptable on the basis of Battelle Columbus Laboratory test procedures and rating requirements developed under the 1978 USEPA Contract shall be used for lockdown encapsulation.
 - b. The encapsulant solvent or vehicle shall not contain a volatile hydrocarbon unless reviewed and approved by DEP.



- c. Latex paint with solids content greater than 15 percent shall be considered a lockdown sealant for coating all non-metallic surfaces.
- d. Encapsulants shall be applied using airless spray equipment. Spraying is to occur at the lowest pressure range possible to minimize fiber release from encapsulant impact at the surface. It shall be applied with a consistent horizontal or vertical motion.
- e. The cleaned layer of the surface barriers shall be removed from walls and floors.

The isolation barriers shall remain in place throughout cleanup. Decontamination enclosure systems shall remain in place and be utilized. A thin coat of lockdown encapsulant shall be applied to all surfaces in the work area which were not the subject of removal or abatement, including the cleaned layer of the surface barriers, but excepting sprinklers, standpipes, and other active elements of the fire suppression system.

1.07 NOTIFICATIONS, PERMITS, WARNING SIGNS, LABELS, AND POSTERS

- A. The asbestos abatement contractor shall submit an Asbestos Project Notification (ACP-7) to the NYCDEP listing each work area within the building separately one week in advance of the start of work.
- B. The registered design professional shall obtain an asbestos abatement permit authorizing the performance of construction work as required for asbestos projects involving one or more of the following activities:
 - 1. Obstruction of an exit door leading to an exit stair or the exterior of the building;
 - 2. Obstruction of an exterior fire escape or access to that fire escape;
 - 3. Obstruction of a fire-rated corridor leading to an exit door;
 - 4. Removal of handrails in an exit stair or ramp;
 - 5. Removal or dismantling of any fire alarm system component including any fire alarm-initiating device (e.g., smoke detectors, manual pull station);
 - 6. Removal or dismantling of any exit sign or any component of the exit lighting system, including photo luminescent exit path markings;



7. Removal or dismantling of any part of a sprinkler system including piping or sprinkler heads;
 8. Removal or dismantling of any part of a standpipe system including fire pumps or valves;
 9. Removal of any non-load bearing / non-fire-rated wall (greater than 45 square feet or 50 percent of a given wall);
 10. Any plumbing work other than the repair or replacement of plumbing fixtures;
 11. Removal of any fire-resistance rated portions of a wall, ceiling, floor, door, corridor, partition, or structural element enclosure including spray-on fire resistance rated materials;
 12. Removal of any fire damper, smoke damper, fire stopping material, fire blocking, or draft stopping within fire-resistance rated assemblies or within concealed spaces;
 13. Any work that otherwise requires a permit from the DOB (full demolitions, alterations, renovations, modifications or plumbing work).
- C. The asbestos abatement contractor shall provide a floor plan showing the areas of the building under abatement and the location of all fire exits in said areas. It shall be prominently posted in the building lobby or comparable location, along with a notice stating the location within the building of the negative air cutoff switch, if applicable.
- D. The general contractor shall submit, as required, an asbestos abatement permit due to one or more of the activities listed in 1.07 (B) (1-8) and (B) (13) of this specification. The asbestos abatement contractor is responsible for submitting, with an asbestos project notification, a work place safety plan (WSPS) and any other applicable construction documents. These documents must be prepared by a registered design professional.
- E. A WSPS is not required for projects requiring an asbestos abatement permit due to one or more of the activities listed in 1.07 (B) (9-12) of this specification. The asbestos abatement contractor shall submit, together with the asbestos project notification, all applicable asbestos abatement permit construction documents.
- F. The general contractor shall retain a Registered Design Professional to perform the inspections required pursuant to Title 28 of the Administrative Code, including but not limited to special inspections required by Chapter 17 of the Building Code, as follows:



1. A final inspection shall be performed by a registered design professional retained by the asbestos abatement contractor after all work authorized by the asbestos abatement permit is completed. The person performing the inspection shall note all failures to comply with the provisions of the Building Code or approved asbestos abatement permit and shall promptly notify the owner in writing. All defects noted in such inspection shall be corrected. The final inspection report shall either:
 - a. Confirm:
 - (1) That the construction work is complete, including the reinstallation or reactivation of any building fire safety or life safety component.
 - (2) That any defects previously noted have been corrected.
 - (3) That all required inspections were performed.
 - (4) That the work is in substantial compliance with the approved asbestos abatement permit construction documents, the Building Code, and other applicable laws and rules.
 - b. Confirm:
 - (1) That the construction work does not return the building (or portion thereof) affected by the abatement project to a condition compliant with the building code and other applicable laws and rules, but that the registered design professional has reviewed an application for asbestos abatement permit construction documents approval that has been approved by the department of buildings, and the subsequent scope of work as approved will, upon completion, render all areas affected by the asbestos project in full compliance with the building code and all applicable laws and rules.
 - (2) That any defects previously noted that are not addressed by the subsequent scope of work as approved by the department of buildings, have been corrected.
 - (3) That all required inspections that are not addressed by the subsequent scope of work as approved by the department of buildings were performed.



- (4) That all completed work pursuant to an asbestos abatement permit is in substantial compliance with the approved asbestos abatement permit construction documents.

- G. The general contractor shall provide the final inspection reports to be filed with DEP on A-TR1 form. Records of final inspections made by registered design professionals shall be submitted to DDC as part of the close out document package.

- H. Erect bilingual (English-Spanish) warning signs around the work space and at every point of potential entry from the outside and at main entrance to building which can be viewed by the public without obstruction, in accordance with OSHA 29 CFR 1926.1101 (K) (Sign Specifications) and Title 15, Chapter 1 of RCNY. The warning signs shall be a bright color so that they will be easily noticeable. The size of the sign and the size of the lettering shall be no less than OSHA requirements.

- I. Provide the required labels for all polyethylene bags and all drums utilized to transport contaminated material to the landfill in accordance with OSHA 29 CFR 1926.1101 (K)(2) and by 49 CFR Parts 171 and 172 of the Department of Transportation regulations.

- J. Provide any other signs, labels, warnings, and posted instructions that are necessary to protect, inform and warn people of the hazard from asbestos exposure. Post in a prominent and convenient place for the workers a copy of the latest applicable regulations from OSHA, EPA, NIOSH, State of New York and New York City and any additional items mandated for posting by the aforementioned regulations.

- K. Furnish all permits, variances and notices required to perform the Work.

1.08 EMERGENCY PRECAUTIONS

- A. Establish emergency and fire exits from the Work Area. The clean side of all emergency exits shall be equipped with two full sets of protective clothing and respirators at all times.

- B. Notify local medical emergency personnel, both ambulance crews and hospital emergency room staff prior to commencement of abatement operations as to the possibility of having to handle contaminated or injured workmen, and shall be advised on safe decontamination.

- C. Prepare to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated immediately for decontamination. When an injury occurs, precautions shall be taken to reduce airborne fiber concentrations (i.e., misting of the air with water) until the injured person has been removed from the Work Area.



- D. Notify, before actual removal of the asbestos material, the local police and fire departments to the danger of entering the Work Area. Asbestos abatement contractor shall make every effort to help these agencies form plans of action should their personnel need to enter the contaminated area.

1.09 SUBMITTALS

A. Pre-Construction Submittals:

- 1. Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm, facility manager and the Construction Project Manager. At this meeting, the asbestos abatement contractor shall present three copies of the following items, bound and indexed. The detailed plan of action must be submitted at least five (5) days prior to the pre-construction meeting.
 - a. Asbestos abatement contractor's scope of work, work plan and schedule.
 - b. Asbestos project notifications, approved variances and plans to Government Agencies.
 - c. Copies of Permits, clearance and licenses if required.
 - d. Schedules: the asbestos abatement contractor shall provide to the Construction Project Manager a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. Asbestos abatement contractor shall post a copy of all schedules at the site:
 - (1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, Work Area preparation, demolition, gross removal, fine cleaning, encapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.
 - (2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.
 - (3) Submit all changes in schedule or staffing to the Construction Project Manager prior to implementation.



- (4) A schedule of equipment to be used including numbers and types of all major equipment such as HEPA Air Filtration Units, HEPA-vacuums, airless sprayers, Water Atomizing Devices and Type "C" compressors.
- e. A written plan and shop drawings for preparation of work site and decontamination chamber.
- f. Description of protective clothing and approved respirator to be used, make, model, NIOSH approval numbers.
- g. Delineation of responsibility of work site supervision, including competent person, with names, resumes, and home telephone numbers.
- h. Explanation of decontamination sequence and isolation techniques.
- i. Description of specific equipment to be utilized, including make and model number of air filtration devices, vacuums, sprayers, etc.
- j. Description of any prepared methods, procedures, techniques, or equipment other than those specified in the Contract Documents.
- k. Explanation of the handling of asbestos contaminated wastes including EPA and NYCDEP identification numbers of Waste Hauler.
- l. Description of the final clean-up procedures to be used.
- m. Name and qualifications of asbestos abatement contractor's Air Monitor including AIHA accreditation, and proof of NIOSH PAT and NIST/NVLAP Bulk Quality Assurance Proficiency of OSHA samples for approval by the City of New York Department of Design and Construction.
- n. Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements of These Specifications.
- o. Safety Data Sheets (SDS) for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project.



No work involving the aforementioned will be allowed to proceed until SDS are reviewed.

- p. Worker Training and Medical Surveillance: Asbestos abatement contractor shall submit a list of the persons who will be employed by him in the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
- q. Logs: Specimen copies of daily progress log, visitor's log, and disposal log.
 - (1) The asbestos abatement contractor shall provide a permanently bound log book of minimum 8-1/2" x 11" size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of Environmental Control Representative; name, address and phone number of asbestos abatement contractor; name, address and phone number of asbestos abatement contractor and City's air testing entity; emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved by the laboratory for entry into the Work Area.
 - (2) All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the Asbestos abatement contractor shall submit a copy of the logbook containing a day-to-day record of personnel log entries countersigned by the Construction Project Manager every day.
- r. Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of ACM, understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

- B. Submit copies of the following items to the Construction Project Manager during the work:



1. Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.
 2. Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Construction Project Manager.
 3. Floor plans indicating asbestos abatement contractor's current work progress shall be submitted for review by the Construction Project Manager at weekly progress meetings.
 4. All asbestos abatement contractors' air monitoring and inspection results.
- C. Project Closeout Submittals:

Upon completion of the project and as a condition of acceptance, the asbestos abatement contractor shall present two copies of the following items, bound and indexed:

1. Lien Waivers from asbestos abatement contractor, Sub-asbestos abatement contractors and Suppliers,
2. Daily OSHA air monitoring results,
3. All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,
4. Field Sign-In/Sign-Out Logs for every shift,
5. Copies of all Building Department Forms and Permits,
6. A Letter of Compliance stating that all the work on this project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations,
7. All Warranties as stated in the Specifications,
 - a. Fully executed disposal certificates and transportation manifest.
8. Project Record: The asbestos abatement contractor shall maintain a project record for all small and large asbestos projects. During the project, the project record shall be kept on site at all times. Upon completion of the project, the project record shall be maintained by the building owner. The



project record shall be submitted to DDC as part of the close out documents.
The project record shall consist of:

- a. Copies of licenses of all asbestos abatement contractors involved in the project;
 - b. Copies of DEP and NYSDOL supervisor and handler certificates for all workers engaged in the project;
 - c. Copies of all project notifications and reports filed with DEP and NYSDOL for the project, with any amendments or variances;
 - d. Copies of all asbestos abatement permits, including associated approved plans and work place safety plan;
 - e. A copy of the air sampling log and all air sampling results;
 - f. A copy of the abatement asbestos abatement contractor's daily log book;
 - g. All data related to bulk sampling including the results of any asbestos surveys performed by an asbestos investigator;
 - h. Copies of all asbestos waste manifests;
 - i. A copy of all Project Monitor's Reports (ACP-15).
 - j. A copy of each ATR-1 Form completed for the asbestos project (if required).
 - k. A copy of each Asbestos Project Conditional Closeout Report (ACP-20).
 - l. A copy of the Asbestos Project Completion Form (ACP-21).
9. The asbestos abatement contractor shall submit one of the following certifications to the DOB, with a copy provided to DDC:
- a. Asbestos Project Completion Form. If an asbestos project has been performed, a copy of the asbestos project completion form issued by DEP shall be submitted to DOB, with a copy being provided to DDC, prior to the issuance of a DOB permit and to any amendment of the underlying construction document approval which increases the scope of the project to include (a) work area(s) not previously covered.



- b. An Asbestos Project Conditional Close-out Form. If an asbestos project has been performed a copy of the asbestos project conditional close-out form issued by DEP shall be submitted to DOB, with a copy being provided to DDC, prior to the issuance of a DOB permit and to any amendment of the underlying construction document approval which increases the scope of the project to include (a) work area(s) not previously covered.

1.10 QUALITY ASSURANCE

- A. All work required for the completion of this project or called for in this Specification must be executed in a workmanlike manner by using the appropriate methods established by regulatory requirements and/or industrial standards. All workmanship or work methods are subject to review and acceptance by the Construction Project Manager. Throughout the Specification, reference is made to codes and standards which establish qualities, levels or types of workmanship which will be considered acceptable. It is the asbestos abatement contractor's responsibility to comply with these codes and standards during the execution of this work.
- B. All materials and equipment required or consumed during the work of this Contract must meet the minimum acceptable criteria established by codes and standards referenced elsewhere in this Specification. Materials and equipment must be submitted for prior approval as part of the asbestos abatement contractor's "Shop Drawings".
- C. It is the asbestos abatement contractor's responsibility, when so required by the Specification or upon written request from the Commissioner or his representative to furnish all required proof that workmanship, materials and/or equipment meet or exceed the codes and standards referenced. Such proof shall be in the form requested, typically a certified report or test conducted by a testing entity approved for that purpose by DDC.
- D. The asbestos abatement contractor shall furnish proof that employees working under his supervision have had instruction on the dangers of asbestos exposure, on respirator use, decontamination, and OSHA regulations. This proof shall be in the form of a notarized affidavit to the effect that the above requirements have been satisfied.
- E. The asbestos abatement contractor will have at all times in his possession and in view at the job site the OSHA regulations 29 CFR 1910.1001, and 1926.1101 Asbestos, and Environmental Protection Agency 40 CFR, Part 61, subpart B: National Emission Standard for asbestos, asbestos stripping, work practices and disposal of asbestos waste. He shall also have one copy of NYC Title 15, Chapter 1 of RCNY and NYS DOL ICR 56 at the job site at all times.



- F. Familiarity with Pertinent Codes and Standards: In procuring all items used in this work, it is the asbestos abatement contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this work meet or exceed the specified requirements, and are suitable for their intended use.
- G. Rejection of Non Complying Items: The Commissioner reserves the right to reject items incorporated into the work that fail to meet the specified minimum requirements. The Commissioner further reserves the right, and without prejudice to other recourse that maybe taken, to accept non-complying items subject to an adjustment in the Contract amount as approved by the City.
- H. Applicable Regulations, Codes and Standards: Applicable standards listed in these Specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:
1. American National Standards Institute (ANSI)
(Successor to USASI and ASA)
25 West 43rd Street (between 5th and 6th Avenue) 4th Floor
New York, NY 10036
212-642-4900
 2. American Society for Testing and Materials (ASTM)
100 Bar Harbor Drive
West Conshohocken, PA 19428-2959
610-832-9500
 3. National Institute for Occupational Safety and Health (NIOSH)
Robert A. Taft Laboratory
4676 Columbia Pkwy
Mailstop R12 Cincinnati, Ohio 45226
513-841-4428
 4. National Electrical Code (NEC)
See NFPA
 5. National Fire Protection Association (NFPA)
1 Batterymarch Park
Quincy, Massachusetts 02169-7471
617-770-3000
 6. New York City Fire Department (FDNY)
9 Metrotech Center
Brooklyn, NY 11201-5431
718-999-2117



7. New York City Department of Buildings (NYC DOB)
Enforcement Division
280 Broadway, New York, New York 10007
212- 566-2850
8. New York City Department of Environmental Protection (NYCDEP)
Bureau of Environmental Compliance
Asbestos Control Program
59-17 Junction Boulevard, 8th Floor
Corona, New York 11368
718-595-3682
9. New York City Department of Health and Mental Hygiene (NYC DOHMH)
Environmental Investigation
125 Worth Street
New York, New York 10013
212-442-3372
10. New York State Department of Labor (NYSDOL)
Division of Safety and Health
Engineering Services Unit
State Office Building Campus
Albany, New York 12240-0010
11. New York City Department of Sanitation
125 Worth Street, Room 714
New York, New York 10013
212-566-1066
12. Occupational Safety and Health Administration (OSHA)
Region II - Regional Office
201 Varick Street, Room 908
New York, New York 10014
212-337-2378
13. United States Environmental Protection Agency (EPA or USEPA)
Region II
Asbestos NESHAPS Contact
Air and Waste Management Division
(Air Compliance Branch) – USEPA
290 Broadway, 21st Floor
New York, New York 10007-1866
212-637-3660



- I. Post all applicable regulations in a conspicuous place at the job site. Assure that the regulations are not altered, defaced or covered by other materials. One copy of each regulation must also be kept at the Asbestos abatement contractor's office.

1.11 CITY/ASBESTOS ABATEMENT CONTRACTOR RESPONSIBILITIES

- A. The normal occupants of the Work Areas will be relocated by the City prior to the performance of the abatement work and returned there to at the conclusion of the abatement work, at no cost to the asbestos abatement contractor. However, the asbestos abatement contractor shall protect all furniture and equipment in the Work Areas in a manner as hereinafter specified. In addition, the asbestos abatement contractor shall perform the work of this Contract in a manner that will be least disruptive to the normal use of the non-Work Areas in the building.
- B. Asbestos abatement contractor shall be responsible for cleaning all portable items not specifically addressed by the Facility, in the Work Areas, or dispose of same as asbestos contaminated waste.
- C. Facility to provide asbestos abatement contractor with a list of items that cannot be removed and need special attention.
- D. Facility to stop all deliveries that may be scheduled to the Work Area while work is in progress.
- E. Facilities to have authorized personnel on site at all times or supply the asbestos abatement contractor with means of contacting such personnel without unreasonable delay. Such personnel shall have access to all areas, have knowledge of electrical, and air handling equipment. Such personnel shall assist the asbestos abatement contractor in case of any power failure or breakdown to shut down air supply systems, to reset and control all protective systems such as alarms, sprinklers, locks, etc. The Facility shall ensure no active air handling systems are operating within the Work Area.
- F. City will not occupy the portions of the building, in which work is being performed during the entire asbestos removal operation, including completion of clean up.
- G. Asbestos abatement contractor shall provide a plan for 24 hour job security both for prevention of theft and for barring entry of curious but unprotected personnel into Work Areas.
- H. Asbestos abatement contractor shall provide surveillance by a fire watch and set forth procedures to be taken for the safety of building occupants in the event of an emergency, in accordance with the WPSP.



- I. Should the failure of any utility occur, the City will not be responsible to the asbestos abatement contractor for loss of time or any other expense incurred.
- J. Facility will be responsible to notify the asbestos abatement contractor of any planned electrical power shutdowns in order to ensure that there are no power interruptions in the negative air pressure systems.
- K. Asbestos abatement contractor shall remove all flammable materials from the work area and all sources of ignition (including but not limited to pilot lights) shall be extinguished.
- L. Asbestos abatement contractor shall require a competent person (as defined in OSHA 1926.1101) to perform the following functions and to be on-site continuously for the duration of the project:
 - 1. Monitor the set up of the Work Area enclosure and ensure its integrity.
 - 2. Control entry and exit into the work enclosure.
 - 3. Ensure that employees are adequately trained in the use of engineering controls, proper work practices, proper personal protective equipment and in decontamination procedures.
 - 4. Insure that employees use proper engineering controls, proper work practices, proper personal protective equipment and proper decontamination procedures.
 - 5. The competent person (as defined in OSHA1926.1101) shall check for rips and tears in work suits, and ensure that they are mended immediately or replaced.

1.12 USE OF BUILDING FACILITIES

- A. City shall make available to the asbestos abatement contractor, from existing outlets and supplies, all reasonably required amounts of water and electric power at no charge.
- B. Electric power to all Work Areas shall be shut down and locked out except for electrical equipment that must remain in service. Safe temporary power and lighting shall be provided by asbestos abatement contractor in accordance with applicable codes. All power to Work Areas shall be brought in from outside the area through ground-fault interrupter circuits installed at the source. Stationary electrical equipment within the Work Area, which must remain in service, shall be adequately protected, enclosed and ventilated. The Facility will identify all electric lines that must remain in service. Asbestos abatement contractor shall protect all lines.



- C. Asbestos abatement contractor shall provide, at his own expense, all electrical, water, and waste connections, tie-ins, extensions, and construction materials, supplies, etc. All water tie-ins shall be hard piped with polyethylene or copper piping. At the end of each shift, asbestos abatement contractor shall disconnect all hoses within the work zone and place in equipment room of the worker decontamination unit. Asbestos abatement contractor shall ensure positive shutoff of all water to Work Area during non-working hours.
- D. Utilities:
1. General:
All temporary facilities required to be installed, shall be subject to the approval of the Commissioner. Prior to starting the work at any site; specify clearly the temporary locations of facilities preferably with sketches and submit the same to the Construction Project Manager for approval.
 2. Water:
The Department of Design and Construction will furnish all water needed for construction, at no cost to the asbestos abatement contractor in buildings under their jurisdiction. All temporary plumbing or adaptations to supply the needs of the Work Area shall be installed and removed by the asbestos abatement contractor and the cost thereof included in the Lump Sum price for abatement work. Shower water for the decontamination unit shall be provided hot. Heating of water, if necessary, shall be provided by the asbestos abatement contractor.
 3. Electricity:
The Department of Design and Construction will furnish all electricity needed for construction, at no cost to the asbestos abatement contractor in buildings under their jurisdiction. All temporary electrical work or adaptations to supply the needs of the Work Area shall be installed and removed by the asbestos abatement contractor and the cost thereof included in the Lump Sum price for abatement work.

In leased spaces, arrangements for water supplies and electricity must be made with the landlord. However, all such arrangements must be made through and are subject to approval of the Department of Design and Construction. Utilities will be provided at no cost to the Asbestos abatement contractor. However, it is the asbestos abatement contractor's (or the General contractor's) responsibility to furnish and install a suitable distribution system to the Work Area. This system will be provided at no cost to the City.



A dedicated power supply for the negative pressure ventilating units shall be utilized. The negative air equipment shall be on a ground fault circuit interrupter (GFCI) protected circuit separate from the remainder of the work area temporary power circuits.

- E. Asbestos abatement contractor shall shut down and lock out all electric power to all work areas except for electrical equipment that must remain in service. Safe temporary power and lighting shall be provided in accordance with all applicable codes. Existing light sources (e.g., house lights) shall not be utilized. All power to work areas shall be brought in from outside the area through ground-fault circuit interrupter at the source.
1. If electrical circuits, machinery, and other electrical systems in or passing through the work area must stay in operation due to health and safety requirements, the following precautions must be taken:
 - a. All unprotected cables, except low-voltage (less than 24 volts) communication and control system cables, panel boxes of cables and joints in live conduit that run through the work area shall be covered with three (3) independent layers of six (6) mil fire retardant polyethylene. Each layer shall be individually duct taped and sealed. All three (3) layers of polyethylene sheeting shall be left in place until satisfactory clearance air sampling results have been obtained.
 - b. Any energized circuits remaining in the work area shall be posted with a minimum two (2) inch high lettering warning sign which reads: DANGER LIVE ELECTRICAL - KEEP CLEAR. A sign shall be placed on all live covered barriers at a maximum of ten (10) foot intervals. These signs shall be posted in sufficient numbers to warn all persons authorized to enter the work area of the existence of the energized circuits.
 2. Any source of emergency lighting which is temporarily blocked as a result of work place preparation shall be replaced for the duration of the project by battery operated or temporary exit signs, exit lights, or photo luminescent path markings.
- F. Asbestos abatement contractor shall provide a separate temporary electric panel board to power asbestos abatement contractor's equipment. The Facility will designate an existing electrical source in proximity to the Work Area. Asbestos abatement contractor's licensed electrician shall provide temporary tie-in via cable, outlet boxes, junction boxes, receptacles and lights, all with ground fault interruption. At no time shall extension cords greater than 50-feet in length be allowed. All temporary electrical installation shall be in accordance with OSHA regulations. The electric shut down for power panel tie-in will be on off-hours and



must be coordinated with the Facility. Asbestos abatement contractor shall provide to the City a specification and drawing outlining his power requirements at the pre-construction meeting.

- G. Additional electrical equipment (i.e., transformers, etc.), which is necessary due to the lack of existing power on the floor, shall be at the asbestos abatement contractor's expense.
- H. Asbestos abatement contractor shall provide fire protection in accordance with all State and Local fire codes.
- I. Sprinklers, standpipes, and other fire suppression systems shall remain in service and shall not be plasticized.
- J. When temporary service lines are no longer required, they shall be removed by the asbestos abatement contractor. Any parts of the permanent service lines, grounds and buildings, disturbed or damaged by the installation and/or removal of the temporary service lines, shall be restored to their original condition by the asbestos abatement contractor. Senior Stationary Engineer will inspect and test all switches, controls, gauges, etc. and shall submit a list to the Construction Project Manager of any equipment damaged by the asbestos abatement contractor.
- K. Asbestos abatement contractor shall supply hot shower water necessary for use in the decontamination unit.

1.13 USE OF THE PREMISES

- A. Asbestos abatement contractor shall confine his apparatus, the storage of materials, and supplies, and the operation of his workmen to limits established by law, ordinances, and the directions of the Construction Project Manager and the Facility. All flammable or combustible materials shall be properly stored to obviate fire and in areas approved by the Facility.
- B. Asbestos abatement contractor shall assure that no exits from the building are obstructed, that appropriate safety barriers are established to prevent access, and that Work Areas are kept neat, clean, and safe.
- C. Asbestos abatement contractor shall maintain exits from the work area or alternative exits shall be established, in accordance with section 1027 of the New York City Fire Code. Exits shall be checked at the beginning and end of each work shift against blockage or impediments to exiting.
- D. If the openings of temporary structural partitions related to abatement work areas block egress, the partition shall consist of two sheets of fire retardant 6-mil plastic, prominently marked as an exit with photo luminescent paint or signage. Cutting



tools (e.g., knife, razor) shall be attached to the work area side of the sheeting for use in the event that the barrier must be cut open to allow egress.

- E. All surrounding work, fixtures, soil lines, drains, water lines, gas pipes, electrical conduit, wires, utilities, duct work railings, shrubbery, landscaping, etc. which are to remain in place shall be carefully protected and, if disturbed or damaged, shall be repaired or replaced as directed by the City, at no additional cost.
- F. All routes through the building to be used by the asbestos abatement contractor shall first be approved by the Construction Project Manager and the Facility.
- G. Attention is specifically drawn to the fact that other asbestos abatement contractors, performing the work of other Contracts, may be (or are) brought upon any of the work sites of this Contract. Therefore, the asbestos abatement contractor shall not have exclusive rights to any site of his work and shall fully cooperate and coordinate his work with the work of other asbestos abatement contractors who may be on (or are on) any site of the work of this Contract. Regulated area exempted.
- H. Temporary toilet facilities must be provided by the asbestos abatement contractor on the site. Coordinate location of facilities with Construction Project Manager. No toilet facilities will be allowed in the Work Area.

1.14 PROTECTION AND DAMAGE

- A. The asbestos abatement contractor is responsible to cover all furniture and equipment that cannot be removed from Work Areas. Moveable furniture and equipment will be removed from Work Areas by asbestos abatement contractor prior to start of work and returned upon successful completion of the final air testing. At the conclusion of the work (after clearance level of air testing reaches the acceptable limit), the asbestos abatement contractor will remove all plastic covering from the walls, floors, furniture, equipment and reinstall furniture and equipment in the cleaned Work Area. The asbestos abatement contractor shall remove all shades, curtains and drapes from the Work Area, and reinstall the same following the final clean up.
- B. Prior to plasticizing, the proposed work areas shall be pre-cleaned using HEPA filtered vacuum equipment and/or wet cleaning methods. Methods that raise dust, such as sweeping or vacuuming with equipment not equipped with HEPA filters, are prohibited.
- C. Use rubber tired vehicles that use non-volatile fuels for conveying material inside building and provide temporary covering, as necessary, to protect floors.



- D. No materials or debris shall be thrown from windows or doors of the building. Building waste system shall NOT be used to remove refuse.
- E. Debris shall be removed from the work site daily. Premises shall be left neat and clean after each work shift, so that work may proceed the next regular workday without interruption. Limited bag storage may take place within the Work Area when approved by the Construction Project Manager.
- F. Protect floors and walls along removal routes from damage, wear and staining with contamination control flooring. All finished surfaces to be protected with Masonite or other rigid sheathing material.
- G. A preliminary inspection for pre-existing damage shall be conducted by asbestos abatement contractor and representative of the City before commencement of the project.

1.15 RESPIRATORY PROTECTION REQUIREMENTS

- A. Respiratory protection shall be worn by all individuals who may be exposed to asbestos fibers from the initiation of the asbestos project until all areas have successfully passed clearance air monitoring in accordance with Regulations and these Specifications.
- B. Asbestos abatement contractor shall develop and implement a written respiratory protection program with required site-specific procedures and elements. The program shall be administered by a properly trained individual. The written respiratory protection program shall include the requirements set forth in OSHA Standard 29 CFR 1910.134, at a minimum.
- C. The Asbestos abatement contractor shall provide workers with individually issued and marked respiratory equipment. Respiratory equipment shall be suitable for the asbestos exposure level(s) in the Work Area(s), as specified in OSHA Standards 26 CFR 1910.134 and 29 CFR 1926.1101, NIOSH Standard 42 CFR 84, or as more stringently specified otherwise, herein.
- D. Where respirators with disposable filter parts are employed, the asbestos abatement contractor will provide sufficient filter parts for replacement as necessary or as required by the applicable regulation.
- E. All respiratory protection shall be NIOSH approved. All respiratory protection shall be provided by asbestos abatement contractor, and used by workers in conjunction with the written respiratory protection program.
- F. Asbestos abatement contractor shall provide respirators selected by an Industrial Hygienist that meet the following requirements:



Table 1. -- Assigned Protection Factors⁵

Type of Respirator ^{1,2}	Half mask	Full facepiece	Helmet/hood
1. Air-Purifying Respirator	³ 10	50
2. Powered Air-Purifying Respirator (PAPR)	50	1,000	⁴ 25/1,000
3. Supplied-Air Respirator (SAR) or Airline Respirator			
• Demand mode	10	50
• Continuous flow mode	50	1,000	⁴ 25/1,000
• Pressure-demand or other positive-pressure mode	50	1,000
4. Self-Contained Breathing Apparatus (SCBA)			
• Demand mode	10	50	50
• Pressure-demand or other positive-pressure mode (e.g., open/closed circuit)	10,000	10,000

Notes:

¹Employers may select respirators assigned for use in higher workplace concentrations of a hazardous substance for use at lower concentrations of that substance, or when required respirator use is independent of concentration.

²The assigned protection factors in Table 1 are only effective when the employer implements a continuing, effective respirator program as required by this section (29 CFR 1910.134), including training, fit testing, maintenance, and use requirements.

³This APF category includes filtering facepieces, and half masks with elastomeric facepieces.

⁴The employer must have evidence provided by the respirator manufacturer that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF or SWPF study or equivalent testing. Absent such testing, all other PAPRs and SARs with helmets/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.

⁵These APFs do not apply to respirators used solely for escape. For escape respirators used in association with specific substances covered by 29 CFR 1910 subpart Z, employers must refer to the appropriate substance-specific standards in that subpart. Escape respirators for other IDLH atmospheres are specified by 29 CFR 1910.134 (d)(2)(ii).



- G. Selection of high efficiency filters:
 - 1. All high efficiency filters shall have a nominal efficiency rating of 100 (99.97-percent effective) when tested against 0.3-micrometer monodisperse diethyl-hexyl phthalate (DOP) particles.
 - 2. Choose N-, R-, or P-series filters based upon the presence or absence of oil particles.
 - a. N-series filters shall only be used for non-oil solid and water based aerosols or fumes.
 - b. R- and P-series filters shall be used when oil aerosols or fumes (i.e., lubricants, cutting fluids, glycerin, etc.) are present. The R-series filters are oil resistant and the P-series filters are oil proof.
 - c. Follow filter manufacture recommendations.
 - 3. If a vapor hazard exists, use an organic vapor cartridge in combination with the high efficiency filter.
- H. Historical airborne fiber level data may serve as the basis for selection of the level of respiratory protection to be used for an abatement task. Historical data provided by the asbestos abatement contractor shall be based on personal air monitoring performed during work operations closely resembling the processes, type of material, control methods, work practices, and environmental conditions present at the site. Documentation of aforementioned results may be requested by the City and/or Third-Party Air Monitor for review. This will not relieve the asbestos abatement contractor from providing personal air monitoring to determine the time-weighted average (TWA) for the work under contract. The TWA shall be determined in accordance with 29 CFR 1926.1101.
- I. At no time during actual removal operations shall half-mask air purifying respirators be allowed unless a full 8-hour TWA and excursion limit have been conducted, and reviewed by the Construction Project Manager. If the TWA and excursion limit have not been conducted, a Supplied-Air Respirator (SAR) or Airline Respirator or Self-Contained Breathing Apparatus (SCBA) must be used. Use of single use dust respirators is prohibited for the above respiratory protection.
- J. Workers shall be provided with personally issued and individually marked respirators. Respirators shall not be marked with any equipment that will alter the fit of the respirator in any way. Only waterproof identification markers shall be used.



- K. Asbestos abatement contractor shall ensure that the workers are qualitatively or quantitatively fit tested by an Industrial Hygienist initially and every 12 months thereafter with the type of respirator he/she will be using.
- L. Whenever the respirator design permits, workers shall perform the positive and negative air pressure fit test each time a respirator is worn. Powered air-purifying respirators shall be tested for adequate flow as specified by the manufacturer.
- M. No facial hairs (beards) shall be permitted to be worn when wearing respiratory protection that requires a mask-to-face seal.
- N. If a worker wears glasses, a spectacle kit to fit their respirator shall be provided by the asbestos abatement contractor at the asbestos abatement contractor's expense.
- O. Respiratory protection maintenance and decontamination procedures shall meet the following requirements:
 - 1. Respiratory protection shall be inspected and decontaminated on a daily basis in accordance with OSHA 29 CFR 1910.134 (b); and
 - 2. High efficiency filters for negative pressure respirators shall be changed after each shower; and
 - 3. Respiratory protection shall be the last piece of worker protection equipment to be removed. Workers must wear respirators in the shower when going through decontamination procedures as stated in Section 3.03 and/or 3.04.
 - 4. Airline respirators with high efficiency filtered disconnect shall be disconnected in the equipment room and worn into the shower. Powered air-purifying respirator face pieces shall be worn into the shower. Filtered/power pack assemblies shall be decontaminated in accordance with manufacturers recommendations; and
 - 5. Respirators shall be stored in a dry place and in such a manner that the face-piece and exhalation valves are not distorted; and
 - 6. Organic solvents shall not be used for washing of respirators.
- P. Authorized visitors shall be provided with suitable respirators and instruction on the proper use of respirators whenever entering the Work Area. Qualitative fit test shall be done to ensure proper fit of respirator.



1.16 PROTECTIVE CLOTHING

- A. Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the work. Provide to all workers, foremen, superintendents, authorized visitors and inspectors, protective disposable clothing consisting of full body coveralls, head covers, gloves and 18-inch high boot type covers or reusable footwear.
- B. In addition to personal protective equipment for workers, the asbestos abatement contractor shall make available at each worksite at least four (4) additional uniforms and required respiratory equipment each day for personnel who are authorized to inspect the work site. He/she shall also provide, for the duration of the work at any site involving a decontamination unit for worksite access, a lockable storage locker for use by the Construction Project Manager. In addition to respiratory masks for workers, the asbestos abatement contractor must have on hand at the beginning of each work day, at least four (4) masks each with two sets of fresh filters, for use by personnel who are authorized to inspect the worksite. The asbestos abatement contractor shall check for proper fit of the respirators of all City personnel authorized to enter the Work Area.
- C. Asbestos handlers involved in tent procedures shall wear two (2) disposable suits, including gloves, hood and footwear, and appropriate respiratory equipment. All street clothes shall be removed and stored in a clean room within the work site. The double layer personal protective equipment shall be used for installation of the tent and throughout the procedure, if a decontamination unit (with shower and clean room) is contiguous to the Work Area, only one (1) layer of disposable personal protective equipment shall be required; in this case, prior to exiting the tent the worker shall HEPA vacuum and wet clean the disposable suit.
- D. The outer disposable suit (if 2 suits are worn) shall be removed and remain in the tent upon exiting. Following the tent disposal and work site clean up the workers shall immediately proceed to a shower at the work site. The inner disposal unit and respirator shall be removed in the shower after appropriate wetting. The disposal clothing shall be disposed of as asbestos-containing waste material. The workers shall then fully and vigorously shower with supplied liquid bath soap, shampoo, and clean dry towels.
- E. Coveralls: provide disposable full-body coveralls and disposable head covers. Require that they be worn by all workers in the Work Area. Provide a sufficient number for all required changes for all workers in the Work Area.
- F. Boots: provide work boots with non-skid soles, and where required by OSHA, foot protection, for all workers. Provide boots at no cost to workers. Paint uppers of all boots yellow with waterproof enamel. Do not allow boots to be removed from the Work Area for any reason after being contaminated with ACM and/or dust.



- G. Hard Hats: provide hard hats as required by OSHA for all workers, and provide a minimum of four spares for Inspectors, visitors, etc. Label all hats with same warning label as used on disposal bags. Require hard hats to be worn at all times that work is in progress that may cause potential head injury. Provide hard hats of the type with polyethylene strap suspension. Require hats to remain in the Work Area throughout the work. Thoroughly clean and decontaminate and bag hard hats prior to removing them from the Work Area at the end of the work.
- H. Goggles: provide eye protection (goggles) as required by OSHA for all workers involved in any activity that may potentially cause eye injury. Require them to be worn at all times during these activities. Thoroughly clean and decontaminate goggles before removing them from the Work Area.
- I. Gloves: provide work gloves to all workers, of the type dictated by the Work and OSHA Standards. Do not remove gloves from the Work Area. Dispose of as asbestos-asbestos contaminated waste at the end of the work. Gloves shall be worn at all times, except during Work Area Preparation activities that do not disturb ACM.
- J. Reusable footwear, hard hats and eye protection devices shall be left in the contaminated Equipment Room until the end of the Asbestos Abatement Work.
- K. Disposable protective clothing shall be discarded and disposed of as asbestos waste every time the wearer exits from the workspace to the outside through the decontamination facility.
- L. Respirators, disposable coveralls, head covers and foot covers shall be provided by the asbestos abatement contractor for the Facilities Representative, Construction Project Manager and any other authorized representative who may inspect the Work Area. Provide two respirators and six respirator filter changes per day.

1.17 AIR MONITORING - ASBESTOS ABATEMENT CONTRACTOR

- A. Asbestos abatement contractor shall employ a qualified industrial hygiene laboratory to analyze air samples in accordance with OSHA Regulations, 1926.1101 (Asbestos Standards for Construction) and New York City regulations.
- B. The industrial hygiene laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).



- C. Industrial hygiene laboratory shall also be a current proficient participant in the NIST/NVLAP Quality Assurance Program for the identification of bulk samples. Laboratory identification number shall be submitted to and approved by the City.
- D. Air monitoring responsibilities for the asbestos abatement contractor's employees, shall be performed by a representative of the industrial hygiene laboratory retained by the asbestos abatement contractor.
- E. Asbestos abatement contractor shall submit to the City all credentials of the designated (as defined in OSHA 1926.1101) and industrial hygiene laboratory representative for approval.
- F. Air monitoring and inspection shall be conducted by the Asbestos abatement contractor's competent person (as defined in OSHA 1926.1101).
- G. Continuous (daily or per shift) monitoring and inspection will include Work Area samples, personnel samples from the breathing zone of a worker to accurately determine the employees' 8-hour TWA (unless Type C respirators are used) and decontamination unit clean room samples.
- H. Work Area samples and employee personnel samples shall be taken using pumps whose flow rates can be determined to an accuracy of +5-percent, at a minimum of two liters per minute. This must be demonstrated at the job site.
- I. Sampling and analysis methods shall be per NIOSH 7400A.
- J. Test Reports:
 - 1. Promptly process and distribute one copy of the test results, to the Commissioner.
 - 2. Prompt reports are necessary so that if required, modifications to work methods and/or practices may be implemented as soon as possible.
 - 3. Asbestos abatement contractor shall by facsimile notify the Commissioner within 24 hours of the results of each test, followed by written notification within three days.
- K. Competent person shall conduct inspections and provide written reports daily. Inspections will include checking the standard operating procedures, engineering control systems, respiratory protection and decontamination systems, packaging and disposal of asbestos waste, and any other aspects of the project which may affect the health and safety of the people and environment.



- L. All costs for required air monitoring by the asbestos abatement contractor's competent person shall be borne by the asbestos abatement contractor.
- M. The City reserves the right to conduct air and surface dust sampling in conjunction with and separate from the Third-Party Air Monitor for the purposes of Quality Assurance.
- N. All samples shall be accompanied by a Chain of Custody Record that shall be submitted to the Construction Project Manager upon completion of analysis.

1.18 THIRD PARTY MONITORING AND LABORATORY

- A. The NYCDDC, at its own expense, will employ the services of an independent Third Party Air Monitoring Firm and Laboratory. The Third Party Air Monitor will perform air sampling activities and project monitoring at the Work Site.
- B. The Laboratory will perform analysis of air samples utilizing Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM). This laboratory shall meet the standards stated in Paragraph 1.17. B.
- C. Observations will include, but not be limited to, checking the standard operating procedures, engineering control systems, respiratory protection, decontamination systems, packaging and disposal of asbestos waste, and any other aspects of the project that may affect the health and safety of the environment, Asbestos abatement contractor, and/or facility occupants.
- D. The Third Party Air Monitoring Firm and the designated Project Monitor shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the asbestos abatement contractor to verify that said performance complies with this Specification. The Third-Party Air Monitor shall be on site throughout the entire abatement operation.
- E. The NYCDDC will be responsible for costs incurred with the Third Party Air Monitoring Firm and laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the Asbestos abatement contractor.
- F. At a minimum, air sampling shall be conducted in accordance with the following schedule:

Abatement Activity	Pre- Abatement	During Abatement	Post- Abatement
Equal to or greater than 10,000 square feet or 10,000 linear feet of ACM	PCM	PCM	TEM



Abatement Activity	Pre-Abatement	During Abatement	Post-Abatement
Less than 10,000 square feet or 10,000 linear feet of ACM	PCM	PCM	PCM

Note: TEM is acceptable wherever PCM is required.

- G. The number of air samples required per stage of abatement and size of abatement project is listed in the table below:

		Pre-Abatement	During Abatement	Post Abatement
Large Asbestos Projects				
1.	Full Containment	10	5	10
2.	Glovebag inside Tent	5 ^a	5 ^a	5 ^a
3.	Exterior Foam and Vertical Surfaces	-	5 ^c	5 ^d
4.	Interior Foam	10	5 ^c	10 ^d
Small Asbestos Projects				
1.	Full Containment	6	3	6
2.	Glovebag inside Tent	3 ^b	3 ^b	3 ^b
3.	Tent	3 ^b	3 ^b	3 ^b
4.	Exterior Foam and Vertical Surfaces	-	3 ^c	3 ^d
5.	Interior Foam	6	3 ^c	6 ^d
Minor Projects				
1.	Glovebag inside Tent	-	-	1 ^d
2.	Tent	-	-	1 ^d
3.	Exterior Foam and Vertical Surfaces	-	-	1 ^d
4.	Interior Foam	-	-	1 ^d

Notes:

- a. if more than three (3) tents then two (2) samples required per enclosure.
- b. if more than three (3) tents then one (1) sample required per enclosure.
- c. samples shall be taken within the work area(s).
- d. area sampling is required only if:
 - visible emissions are detected during the project
 - during-abatement area sampling results exceeded 0.01 f/cc or the pre-abatement area sampling result(s) for interior projects where applicable.
 - work area to be reoccupied is an interior space at a school, healthcare, or daycare facility.



- H. Prior to commencement of abatement activities, the Third Party Air Monitoring Firm will collect a minimum number of area samples inside each homogeneous work area.
 - 1. Samples will be taken during normal occupancy activities and circumstances at the work site.
 - 2. Samplers shall be located within the proposed work area and at all proposed isolation barrier locations.
 - 3. Samples shall be analyzed using PCM.
 - 4. The number of samples to be collected will be determined by the size of the project and the abatement methods to be utilized.

- I. Frequency and duration of the air sampling during abatement shall be representative of the actual conditions during the abatement. The size of the asbestos project will be a factor in the number of samples required to monitor the abatement activities. The following minimum schedule of samples shall be required daily.
 - 1. For large asbestos projects employing full containment, area air sampling shall be performed at the following locations:
 - a. Two area samples outside the work area in uncontaminated areas of the building, remote from the decontamination facilities.
 - (1) Primary location selection shall be within 10 feet of isolation barriers.
 - (2) Where negative ventilation exhaust runs through uncontaminated building areas, one of the area samples will be required in these areas to monitor any potential fiber release.
 - (3) Where exhaust tubes have been grouped together in banks of up to five (5) tubes, with each tube exhausting separately and the bank of tubes terminating together at the same controlled area, one area air sample shall be taken.
 - b. One area sample within the uncontaminated entrance to each decontamination enclosure system.
 - c. Where adjacent non-work areas do not exist, an exterior area sample shall be taken.



- d. One area sample within 5 feet of the unobstructed exhaust from a negative pressure ventilation system exhausting indoors but not within a duct.
 - e. One area sample outside, but within 25 feet of, the building or structure, if the entire building or structure is the work area.
2. For large asbestos projects involving interior foam method, area air sampling shall be performed at the following sampling locations:
- a. One area sample taken outside the work area within 10 feet of isolation barriers.
 - b. One area sample taken within the uncontaminated entrance to each worker decontamination and waste decontamination enclosure system.
 - c. One area sample within 5 feet of the unobstructed exhaust from a negative pressure ventilation system exhausting indoors but not within a duct, if applicable.
 - d. Three area samples inside the work area.
 - e. One area sample where the negative ventilation exhaust ducting runs through uncontaminated building areas, if applicable.
3. For large asbestos projects employing the glovebag procedure within a tent, a minimum of five continuous air samples shall be taken concurrently with the abatement for each work area, unless there are more than three enclosures, in which case two area samples per enclosure are required.
- a. Four area samples taken outside the work area within ten feet of tent enclosure(s).
 - b. One area sample taken within the uncontaminated entrance to each worker and waste decontamination enclosure system.
 - c. One area sample within five feet of the unobstructed exhaust from a negative pressure ventilation system exhausting indoors, but not within a duct, if applicable.
 - d. One area sample where negative ventilation exhaust ducting runs through uncontaminated building areas, if applicable.



4. For large asbestos projects involving exterior foam method or removal of ACM from vertical surfaces, a minimum of five continuous area samples shall be taken concurrently with the abatement for each work area using the following minimum requirements:
 - a. Three area samples inside the work area and remote from the decontamination systems.
 - b. One area sample within the uncontaminated entrance to each worker and waste decontamination enclosure system.
 - c. One area sample outside the work area within 25 feet of the building or structure, if the entire building or structure is the work area.
 - d. One area sample inside the building or structure at the egress point to the work area, if applicable.

5. For small asbestos projects employing full containment, a minimum of three continuous area samples shall be taken concurrently with the abatement for each work area at the following locations:
 - a. Two area samples taken outside the work area within ten feet of the isolation barriers.
 - b. One area sample within the uncontaminated entrance to each worker or waste decontamination enclosure system.
 - c. One area sample within five feet of the unobstructed exhaust from a negative pressure ventilation system exhausting indoors, but not within a duct, if applicable.
 - d. One area sample where negative ventilation exhaust ducting runs through an uncontaminated building area, if applicable.

6. Tent Procedures:

For projects involving more than 25 linear feet or 10 square feet, a minimum of three continuous samples shall be taken concurrently throughout abatement.

- J. Post-abatement clearance air monitoring for projects not solely employing glove-bag procedures shall include a minimum number of area samples inside each homogeneous work area and outside each homogeneous work area (five samples inside/five samples outside for Large Projects and three samples inside/three samples outside for Small Projects). In addition to the five sample inside/five sample outside minimum for Large Projects, one additional representative area



sample shall be collected inside and outside the work area for every 5,000 square feet above 25,000 square feet of floor space where ACM has been abated.

- K. Post-abatement clearance air monitoring for Small Projects solely employing glove-bag procedures is not required unless one or more of the following events occurs. In such cases, post-abatement clearance air monitoring procedures shall be followed. The events requiring post-abatement clearance air monitoring are:
1. The integrity of the glove-bag was compromised,
 2. Visible emissions are detected outside the glove-bag, and/or
 3. Ambient levels exceed 0.01 f/cc during abatement.
- L. Monitoring requirements for other than post-abatement clearance air monitoring are as follows:
1. The sampling zone for indoor air samples shall be representative of the building occupants' breathing zone.
 2. If possible, outdoor ambient and baseline samplers should be placed about 6 feet above the ground surface in reasonable proximity to the building and away from obstructions and drafts that may unduly affect airflow.
 3. For outdoor samples, if access to electricity and concerns about security dictate a rooftop site, locations near vents and other structures on the roof that would unduly affect airflow shall be avoided.
 4. Air sampling equipment shall not be placed in corners of rooms or near obstructions such as furniture.
 5. Samples shall have a chain of custody record.
- M. Area air sampling during abatement shall be conducted as specified in the following documents except as restricted or modified herein:
1. Measuring Airborne Asbestos Following an Abatement Action, US EPA document 600/4-85-049 (Nov., 1985);
 2. Guidance for Controlling Asbestos-Containing Materials in Buildings; US EPA Publication 560/5-85- 024 (June, 1984);
 3. Methodology for the Measurement of Airborne Asbestos by Electron Microscopy US EPA Contract No. 68-02- 3266;



- 4. Mandatory and non-mandatory Electron Microscopy Methods set forth in 40 CFR Part 763, Subpart E, Appendix A.
 - 5. NIOSH 7400 method using “A” counting rules
- N. In accordance with the above criteria, area samples (see NYCDEP Asbestos Control Program Regulations) shall conform to the following schedule:

Area Samples for Analysis by	Minimum Volume	Flow Rate
PCM, 25mm cassettes	560 liters	5 to 15 liters/minute
TEM, 25mm cassettes	560 liters	1 to 10 liters/minute
TEM, 37mm cassettes	1,250 liters	1 to 10 liters/minute

- O. Post-abatement clearance air monitoring requirements are as follows:
- 1. Sampling shall not begin until at least one hour after wet cleaning has been completed and no visible pools of water or condensation remain.
 - 2. Samplers shall be placed at random around the work area. If the work area contains the number of rooms equivalent to the number of required samples based on floor area, a sampler shall be placed in each room. When the number of rooms is greater than the required number of samples, a representative sample of rooms shall be selected.
 - 3. The representative samplers placed outside the work area but within the building shall be located to avoid any air that might escape through the isolation barriers and shall be approximately 50 feet from the entrance to the work area, and 25 feet from the isolation barriers.
- P. The following aggressive sampling procedures shall be used within the work area during all clearance air monitoring:
- 1. Before starting the sampling pumps, use forced air equipment (such as a one horsepower leaf blower) to direct exhaust air against all walls, ceilings, floors, ledges and other surfaces in the work area. This pre-sampling procedure shall take at least five minutes per 1,000 square feet of floor area; then
 - 2. Place a 20-inch diameter fan in the center of the room. Use one fan per 10,000 cubic feet of room space. Place the fan on slow speed and point it toward the ceiling.
 - 3. Start the sampling pumps and sample for the required time or volume.



4. Turn off the pump and then the fan(s) when sampling is completed.
5. Collect a minimum number of area samples inside and outside each homogeneous work area (five inside/five outside samples for Large Projects and three inside/three outside samples for Small Projects). In addition to the minimum for Large Projects, one representative area samples shall be collected inside and outside the work area for every 5,000 square feet above 25,000 square feet of floor space where ACM has been abated.

Q. For post-abatement monitoring, area samples shall conform to the following schedule:

Area Samples for Analysis by	Minimum Volume	Flow Rate
PCM	1,800 liters	5 to 15 liters/minute
TEM	1,250 liters	1 to 10 liters/minute

1. Each homogeneous work area that does not meet the clearance criteria shall be thoroughly re-cleaned using wet methods, with the negative pressure ventilation system in operation. New samples shall be collected in the work area as described above. The process shall be repeated until the work site meets the clearance criteria.
2. For an asbestos project with more than one homogeneous work area, the release criterion shall be applied independently to each work area.
3. Should airborne fiber concentrations exceed the clearance criteria, the asbestos abatement contractor shall re-clean the work area utilizing wet wiping and HEPA-vacuuuming techniques. Following completion of re-cleaning activities, the Third-Party Air Monitor will perform an observation of the Work Area. If the Third-Party Air Monitor determines that the work was performed in accordance with the specifications, the appropriate settling period will be observed and additional air sampling will be performed.
4. All costs resulting from additional air tests and observations shall be borne by the asbestos abatement contractor. These costs may include, but are not limited to, labor, analysis fees, materials, and expenses.
5. After the area has been found to be in compliance, the asbestos abatement contractor may remove Isolation Barriers and perform final cleaning as specified.

R. Clearance and/or Re-occupancy Criteria:

1. The clearance criteria shall be applied to each homogeneous work area independently.



2. For PCM analysis, the clearance air monitoring shall be considered satisfactory when each of the 5 inside/5 outside samples for Large Projects and/or 3 inside/3 outside samples for Small Projects is less than or equal to 0.01 f/cc or the background concentrations, whichever is greater.
3. For TEM analysis, the clearance air monitoring shall be considered satisfactory when the requirements stated in 40 CFR Part 763, Subpart E, Appendix A, Section IV are met.
4. As soon as the air monitoring tests are completed, the Third-Party Air Monitor will send the results of such tests to the City and notify the Asbestos abatement contractor.
5. The asbestos abatement contractor shall initiate the appropriate closeout information into the DEP ARTS database within 24 hours of work area completion to allow the Third Party Air Monitoring Firm to complete and submit the ACP-15 forms for each specific work area.
6. The asbestos abatement contractor shall provide the ACP-20 and ACP-21 forms to the Third Party Air Monitoring Firm within 48 hours of receipt.

1.19 TAMPERING WITH TEST EQUIPMENT

All parties to this Contract are hereby notified that any tampering with testing equipment will be considered an attempt at falsifying reports and records to federal and state agencies and each offense will be prosecuted under applicable state and federal criminal codes to the fullest extent possible.

1.20 GUARANTEE

- A. Work performed in compliance with this Contract shall be guaranteed for a period of one year from the date the completed work is accepted by the City.
- B. The asbestos abatement contractor shall not be held liable for the guarantee where the repair required under the guarantee is a result of obvious abuse or vandalism, as determined by the Commissioner.
- C. The City will notify the asbestos abatement contractor in writing regarding defects in work under the guarantee.



PART 2 – PRODUCTS

2.01 MATERIAL HANDLING

- A. Deliver all materials to the job site in their manufacturer's original container, with the manufacturer's label intact and legible.
 - 1. Maintain packaged materials with seals unbroken and labels intact until time of use.
 - 2. Store all materials on pallets, away from any damp and/or wet surface. Cover materials in order to prevent damage and/or contamination.
 - 3. Promptly remove damaged materials and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the City.
- B. The Construction Project Manager may reject as non-complying such material and products that do not bear identification satisfactory to the Construction Project Manager as to manufacturer, grade, quality and other pertinent information.

2.02 MATERIALS

- A. Wetting agents: (Surfactant) shall consist of resin materials in a water base, which have been tested to ensure materials are non-toxic and non-hazardous. Surfactants shall be installed according to the manufacturer's written instructions.
- B. Encapsulants: Liquid material which can be applied to asbestos-containing material which temporarily controls the possible release of asbestos fibers from the material or surface either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). A thin coat of lockdown encapsulant shall be applied to all surfaces in the work area which were not the subject of removal or abatement, including the cleaned layer of the surface barriers, but excepting sprinklers, standpipes, and other active elements of the fire suppression system.
- C. During abatement activities, replacement materials shall be stored outside the work area in a manner to prevent contamination. Materials required for the asbestos project (i.e., plastic sheeting, replacement filters, duct tape, etc.) shall be stored to prevent damage or contamination.
- D. Framing Materials and Doors: As required to construct temporary decontamination facilities and isolation barriers. Lumber shall be high grade, new, finished one side and fire retardant.



- E. Fire Retardant Polyethylene Sheeting: minimum uniform thickness of 6-mil. Provide largest size possible to minimize seams. All materials used in the construction of temporary enclosures shall be noncombustible or fire-retardant in accordance with NFPA 701 and 255.
- F. Fire Retardant Reinforced Polyethylene Sheeting: For covering floor of decontamination units, provide translucent, nylon reinforced or woven polyethylene laminated, fire retardant polyethylene sheeting. Provide largest size possible to minimize seams, minimum uniform thickness 6-mil. All materials used in the construction of temporary enclosures shall be noncombustible or fire-retardant in accordance with NFPA 701 and 255.
- G. Drums: Asbestos-transporting drums, sealable and clearly marked with warning labels as required by OSHA and EPA.
- H. Polyethylene Disposal Bags: Asbestos disposal bags, minimum of fire retardant 6-mil thick. Bags shall be clearly marked with warning labels as required by OSHA and EPA.
- I. Signs: Asbestos warning signs for posting at perimeter of Work Area, as required by OSHA and EPA.
- J. Waste Container Bag Liners and Flexible Trailer Trays: One piece leak-resistant flexible tray with absorbent pad.
- K. Tape: Provide tape which is of high quality with an adhesive that is formulated to aggressively stick to sheet polyethylene.
- L. Spray Adhesive: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.
- M. Flexible Duct: Spiral reinforced flex duct for air filtration devices.
- N. Protective Clothing: Workers shall be provided with sufficient sets of properly fitting, full-body, disposable coveralls, head covers, gloves, and 18-inch high boot-type foot covers. Protective clothing shall conform to OSHA Standard 29 CFR 1926.1101.
- O. Surfactants, strippers, sealers, or any other chemicals used shall be non-carcinogenic and non-toxic.
- P. Materials used in the construction of temporary enclosures shall be noncombustible or fire-retardant in accordance with NFPA 701 and 255.



2.03 TOOLS AND EQUIPMENT

- A. Air Filtration Device (AFD): AFDs shall be equipped with High Efficiency Particulate Air (HEPA) filtration systems and shall be approved by and listed with Underwriter's Laboratory.

- B. Scaffolding: All scaffolding shall be designed and constructed in accordance with OSHA (29 CFR 1926/1910), New York City Building Code, and any other applicable federal, state and local government regulations. Whenever there is a conflict or overlap of the above references the most stringent provisions are applicable. All scaffolding and components shall be capable of supporting without failure a minimum of four times the maximum intended load, plus an allowance for impact. All scaffolding and staging must be certified in writing by a Professional Engineer licensed to practice in the State of New York.
 - 1. Equip rungs of all metal ladders, etc., with an abrasive, non-slip surface.
 - 2. Provide non-skid surface on all scaffold surfaces subject to foot traffic. Scaffold ends and joints shall be sealed with tape to prevent penetration of asbestos fibers.

- C. Transportation Equipment: Transportation Equipment, as required, shall be suitable for loading, temporary storage, transit and unloading of asbestos contaminated waste without exposure to persons or property. Any temporary storage containers positioned outside the building for temporary storage shall be metal, closed and locked.

- D. Vacuum Equipment: All vacuum equipment utilized in the Work Area shall utilize HEPA filtration systems.

- E. Vacuum Attachments: Soft Brush Attachment, Asbestos Scraper Tool, Drill Dust Control Kit.

- F. Electric Sprayer: An electric airless sprayer suitable for application of encapsulating material and shall be approved by and listed with Underwriters Laboratory.

- G. Water Sprayer: The water sprayer shall be an airless or other low-pressure sprayer for amended water application.

- H. Water Atomizer: Powered air-misting device equipped with a ground fault interrupter and equipped to operate continuously.



- I. Brushes: All brushes shall have nylon bristles. Wire brushes are excluded from use due to their potential to shred asbestos fibers into small, fine fibers. Wire brushes maybe used for cleaning pipe joints within glove-bags upon written approval of the Construction Project Manager.
- J. Power tools used to drill, cut into, or otherwise disturb ACM shall be manufacturer-equipped with HEPA filtered local exhaust ventilation. Abrasive removal methods, including the use of beadblasters, are prohibited.
- K. Other Tools and Equipment: Asbestos abatement contractor shall provide other suitable tools for the stripping, removal, encapsulation, and disposal activities including but not limited to: hand-held scrapers, sponges, rounded-edge shovels, brooms, and carts.
- L. Fans and Leaf Blower: Provide Leaf Blower (one leaf blower per floor) and one 20-inch diameter fans for each 10,000 cubic feet of Work Area volume to be used for aggressive sampling technique for clearance air testing.
- M. Fire Extinguishers: At least one fire extinguisher with a minimum rating 2-A:10-B:C shall be required for each work place. In the case of large asbestos projects, at least two such fire extinguishers shall be required.
- N. First Aid Kits: Asbestos abatement contractor shall maintain adequately stocked first aid kits in the clean rooms of the decontamination units and within Work Areas. The first aid kit shall be approved by a licensed physician for the work to be performed under this Contract.
- O. Water Service:
 - 1. Temporary Water Service Connection: All connections to the Facilities water system shall include back flow protection. Valves shall be temperature and pressure rated for operation of the temperature and pressures encountered. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping, and equipment. Leaking or dripping fittings/valves shall be repaired and or replaced as required.
 - 2. Water Hoses: Employ new heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each Work Area and to each Decontamination Enclosure Unit. Provide fittings as required for connection to existing wall hydrants or spouts, as well as temporary water heating equipment, branch piping, showers, shut-off nozzles and equipment.



3. Water Heater: Provide UL rated 40-gallon electric water heaters to supply hot water for Personal Decontamination Enclosure System Shower. Activate from 30 Amp Circuit breakers located within the Decontamination Enclosure sub panel. Provide relief valve compatible with water heater operations, pipe relief valve down to drip pan at floor level with type 'L' copper piping. Drip pans shall be 6-inch deep and securely fastened to water heater. Wiring of the water heater shall comply with NEMA, NECA, and UL standards.

P. Electrical Service:

1. General: Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service.
2. Temporary Power: Provide service to decontamination unit sub panel with minimum 60 AMP, two pole circuit breaker or fused disconnect connected to the building's main distribution panel. Sub panel and disconnect shall be sized and equipped to accommodate all electrical equipment required for completion of the work.
3. Voltage Differences: Provide identification warning signs at power outlets that are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets. Dry type transformers shall be provided where required to provide voltages necessary for work operations.
4. Ground Fault Protection: Equip all circuits for any purpose entering Work Area with ground fault circuit interrupters (GFCI). Locate the GFCIs outside the Work Area so that all circuits are protected prior to entry to Work Area. Provide circuit breaker type ground fault circuit interrupters (GFCI) equipped with test button and reset switch for all circuits to be used for any purpose in Work Area, decontamination units, exterior, or as otherwise required by NEC, OSHA or other authority.
5. Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general run wiring overhead, and rise vertically where wiring will be least subject to damage from operations.
6. Temporary Wiring: In the Work Area shall be type UF non-metallic sheathed cable located overhead and exposed for surveillance. Provide liquid tight enclosures or boxes for all wiring devices. Do not wire temporary lighting with plain, exposed (insulated) electrical conductors.
7. Electrical Power Cords: Use only grounded extension cords; use hard service cords where exposed to traffic and abrasion. Use single lengths of cords only.



8. Temporary Lighting: All lighting within the Work Area shall be liquid and moisture proof and designed for the use intended.
 - a. Provide sufficient temporary lighting to ensure proper workmanship everywhere; by combined use of daylight, general lighting, and portable plug-in task lighting.
 - b. Provide lighting in the Decontamination Unit as required to supply a minimum 50-foot candle light level.
9. If electrical circuits, machinery, and other electrical systems in or passing through the work area must stay in operation due to health and safety requirements, the following precautions must be taken:
 - a. All unprotected cables, except low-voltage (less than 24 volts) communication and control system cables, panel boxes of cables and joints in live conduit that run through the work area shall be covered with three (3) independent layers of six (6) mil fire retardant polyethylene. Each layer shall be individually duct taped and sealed. All three (3) layers of polyethylene sheeting shall be left in place until satisfactory clearance air sampling results have been obtained.

2.04 CLEANING

- A. Throughout the construction period, the asbestos abatement contractor shall maintain the building as described in this Section.
 1. The asbestos abatement contractor shall prevent building areas other than the Work Area from becoming contaminated with asbestos-containing dust or debris. Should areas outside the Work Area become contaminated with asbestos-containing dust or debris as a consequence of the asbestos abatement contractor's work practices, the asbestos abatement contractor shall be responsible for cleaning these areas in accordance with the procedures appended in Title 15, Chapter 1 of RCNY and NYS DOL ICR56. All costs incurred in cleaning or otherwise decontaminating non-Work Areas and the contents thereof shall be borne by the asbestos abatement contractor at no additional cost to the City.
 2. The asbestos abatement contractor shall provide to all personnel and laborers the required equipment and materials needed to maintain the specified standard of cleanliness.



B. General

1. Waste water from asbestos removal operations, including shower water, may be discharged into the public sewer system only after approved filtration is on operation to remove asbestos fibers.
2. Asbestos wastes shall be double bagged in six mil (.006") fire retardant polyethylene bags approved for ACM disposal and shall be properly labeled and handled before disposal.
3. All waste generated shall be bagged, wrapped or containerized immediately upon removal. The personal and waste decontamination enclosure systems and floor and scaffold surfaces shall be HEPA vacuumed and wet cleaned at the end of each work shift at a minimum.
4. The asbestos abatement contractor shall use corrugated cartons or drums for disposal of asbestos-containing waste having sharp edged components (e.g., nails, screws, metal lathe and tin sheeting) that may tear polyethylene bags and sheeting. The waste within the drums or cartons must be double bagged.
5. The asbestos abatement contractor shall transport all bags of waste to disposal site in thirty gallon capacity metal or fiber drums with tight lids, or in locked steel dumpster.
6. Dumping of debris, waste or bagged waste will not be permitted.
7. The waste decontamination enclosure system shall be wet cleaned twice using wet cleaning methods upon completion of waste removal. When the worker decontamination enclosure shower room alternates as a waste container wash room, the shower room shall be washed immediately with cloths or mops saturated with a detergent solution prior to wet cleaning.
8. Excessive water accumulation or flooding in the work area shall require work to stop until the water is collected and disposed of properly.
9. ACM shall be collected utilizing rubber dust pans and rubber squeegees.
10. HEPA vacuums shall not be used on wet materials unless specifically designed for that purpose.
11. Metal shovels shall not be used within the work area.
12. Mastic solvent when used will be applied in moderation (e.g., by airless sprayer). Saturation of the concrete floor with mastic solvent must be avoided.



13. The asbestos abatement contractor shall retain all items in the storage area in an orderly arrangement allowing maximum access, not impeding traffic, and providing the required protection of all materials.
14. The asbestos abatement contractor shall not allow accumulation of scrap, debris, waste material, and other items not required for use in this work. When asbestos contaminated waste must be kept on the work site overnight or longer, it shall be double bagged and stored in accordance with New York City Department of Sanitation (NYCDOS) regulation Title 16 Chapter 8, and Federal, State and City laws.
15. At least twice a week (more if necessary), the asbestos abatement contractor shall completely remove all scrap, debris and waste material from the job site.
16. The asbestos abatement contractor shall provide adequate storage space for all items awaiting removal from the job site, observing all requirements for fire protection and concerns for the environment.
17. All respiratory protection equipment shall be selected from the latest NIOSH Certified Equipment list.
18. Daily and more often, if necessary, the asbestos abatement contractor shall inspect the Work Areas and adjoining spaces, and pick up all scrap, debris, and waste material. All such items shall be removed to the place designated for their storage.
19. Weekly, and more often, if necessary, the asbestos abatement contractor shall inspect all arrangements of materials stored on the site; re-stack and tidy them or otherwise service them to meet the requirements of these Specifications.
20. The asbestos abatement contractor shall maintain the site in a neat and orderly condition at all times.

PART 3 – EXECUTION

3.01 WORKER DECONTAMINATION FACILITY

- A. Large Asbestos Projects (Small Project Option):
 1. Provide a worker decontamination facility in accordance with, Title 15, Chapter 1, OSHA Standard 29 CFR 1926.1101, 12NYCRR Part 56 and as



specified herein. Unless approved by NYCDEP and the City, worker decontamination facilities shall be attached to the Work Areas

- a. Structure:
 - (1) Use modular systems or build using wood or metal frame studs, joists, and rafters placed at a maximum of 16 inches on-center.
 - (2) When worker decontamination unit is located outdoors, in areas with public access, or in correctional facilities, frame work shall be lined with minimum 3/8" thickness fire rated plywood sheathing. Sheathing shall be caulked or taped airtight at all joints and seams.
 - (3) Interior shall be covered with two layers of fire retardant 6-mil polyethylene sheeting, with a minimum overlap of 12 inches at seams. Seal seams airtight using tape and adhesive. The interior floor shall be covered with two (2) layers of reinforced fire-retardant polyethylene sheeting with a minimum overlap on the walls of twelve inches.
 - (4) Entrances to the decontamination unit shall be secured with lockable hinged doors. Doors shall be open at all times when abatement operations are in progress. Doors shall be louvered to allow for air movement through the decontamination units into Work Area.
- b. Curtained Doorways: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms.
- c. Air Locks: Air locks shall consist of two curtained doorways placed a minimum of three feet apart.
- d. Decontamination Enclosure System shall be placed adjacent to the Work Area and shall consist of three totally enclosed chambers, separated from Work Area and each other by airlocks, as follows:
 - (1) Equipment Room: The equipment room shall have a curtain doorway to separate it from the Work Area, and share a common airlock with the shower room. The equipment room shall be large enough to accommodate at least one worker (allowing them enough room to remove their protective clothing and footwear), and a fire retardant 6-mil disposal bag



for collection of discarded clothing and equipment. The equipment room shall be utilized for the storage of equipment and tools after decontamination using a HEPA-vacuum and/or wet cleaning. A one-day supply of replacement filters, in sealed containers, for HEPA-vacuums and negative air machines, extra tools, containers of surfactant, and other materials and equipment required for the project shall be stored here. A walk-off pan filled with water shall be placed in the Work Area just outside the equipment room for persons to clean foot coverings when leaving the Work Area. Contaminated footwear and reusable work clothing shall be stored in this room.

- (2) Shower Room: The shower room shall have two airlocks (one that separates it from the equipment room and one that separates it from the clean room). The shower room shall contain at least one shower, with hot and cold water adjustable at the tap, per six workers. Careful attention shall be given to the shower to ensure against leaking of any kind and shall contain a rigid catch basin at least six inches deep. Asbestos abatement contractor shall supply towels, shampoo and liquid soap in the shower room at all times. Shower water shall be continuously drained, collected, and filtered through a system with at least a 5-micron particle size collection capacity. A system containing a series of several filters with progressively smaller pore sizes shall be used to avoid rapid clogging of the filters by large particles. Pumps shall be installed, maintained and utilized in accordance with manufacturer's recommendations. Filtered water shall be discharged in accordance with applicable codes. Contaminated filters shall be disposed of as asbestos waste.
- (3) Clean Room: The clean room shall share a common airlock with the shower room and shall have a curtained doorway to separate it from outside non-contaminated areas. Lockers, for storage of workers' street clothing, and shelves, for storing respirators, shall be provided in this area. Clean disposable clothing, replacement filters for respirators, and clean dry towels shall be provided in the clean room. The clean room shall not be used for the storage of tool, equipment or other materials.



- B. Small Asbestos Projects:
 - 1. Provide a worker decontamination facility in accordance with, Title 15, Chapter 1, OSHA Standard 29 CFR 1926.1101, 12NYCRR Part 56 and as specified herein. Unless approved by NYCDEP and the City, worker decontamination facilities shall be attached to the Work Areas.
 - 2. The worker decontamination enclosure system shall consist of, as a minimum, an equipment room, a shower room, and a clean room separated from each other and from the work area by curtained doorways. The equipment storage, personnel gross decontamination and removal of disposal clothing shall occur in the equipment room prior to entering the shower. All other requirements shall be the same as described above for a large asbestos project.
 - 3. For small asbestos projects with only one exit from the work area, the shower room may be used as a waste washroom. The clean room shall not be used for waste storage. All other requirements shall be the same as described above for a large asbestos project.
- C. Decontamination Enclosure System Utilities: Lighting, heat, and electricity shall be provided as necessary by the Asbestos abatement contractor, and as specified herein.

3.02 WASTE DECONTAMINATION FACILITY

- A. Large Asbestos Project (Small Project Option)
 - 1. Provide a worker decontamination facility in accordance with, Title 15, Chapter 1, OSHA Standard 29 CFR 1926.1101, 12NYCRR Part 56 and as specified herein. Unless approved by NYCDEP and the City, worker decontamination facilities shall be attached to the Work Areas.
 - a. Structure:
 - (1) Use modular systems or build using wood or metal frame studs, joists, and rafters placed at a maximum of 16 inches on-center.
 - (2) When worker decontamination unit is located outdoors, in areas with public access, or in correctional facilities, frame work shall be lined with minimum 3/8" thickness fire rated plywood sheathing. Sheathing shall be caulked or taped airtight at all joints and seams.



- (3) Interior walls shall be covered with two layers of fire retardant 6-mil polyethylene sheeting, with a minimum overlap of 12 inches at seams. Seal seams airtight using tape and adhesive. The interior floor shall be covered with two (2) layers of reinforced fire-retardant polyethylene sheeting with a minimum overlap on the walls of twelve inches.
 - (4) Entrances to the decontamination unit shall be secured with lockable hinged doors. Doors shall be open at all times when abatement operations are in progress. Doors shall be louvered to allow for air movement through the decontamination units into the Work Area.
- b. **Curtained Doorways:** A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms.
 - c. **Air Locks:** Air locks shall consist of two curtained doorways placed a minimum of three feet apart.
 - d. **Decontamination Enclosure System** shall be located outside the work area and attached to all locations through which ACM waste will be removed from the work area and shall consist of two totally enclosed chambers, separated from the Work Area and each other by airlocks, as follows:
 - (1) **Washroom:** An equipment washroom shall have two air locks (one separating the unit from the Work Area and one common air lock that separates it from the holding area). The washroom shall have facilities for washing material containers and equipment. Gross removal of dust and debris from contaminated material containers and equipment shall be accomplished in the Work Area, prior to moving to the washroom.
 - (2) **Holding Area:** A holding area shall share a common air lock with the equipment washroom and shall have a curtained doorway to outside areas. A hinged, lockable door shall be placed at the holding area entrance to prevent unauthorized access into the Work Area.

B. Small Asbestos Project:

1. The worker decontamination enclosure system shall consist of, as a minimum, an equipment room, a shower room, and a clean room separated



from each other and from the work area by curtained doorways. The equipment storage, personnel gross decontamination and removal of disposal clothing shall occur in the equipment room prior to entering the shower. All other requirements shall be the same as described above for a large asbestos project.

2. For small asbestos projects with only one exit from the work area, the shower room may be used as a waste washroom. The clean room shall not be used for waste storage. All other requirements shall be the same as described above for a large asbestos project.
- C. Decontamination Enclosure System Utilities: Lighting, heat, and electricity shall be provided as necessary by the Asbestos abatement contractor, and as specified herein.

3.03 PERSONNEL ENTRANCE AND DECONTAMINATION PROCEDURES FOR REMOVAL OPERATIONS UTILIZING REMOTE DECONTAMINATION FACILITIES

- A. All individuals who enter the Work Area shall sign the entry log, located in the clean room, upon each entry and exit. The log shall be permanently bound and shall fully identify the facility, agents, asbestos abatement contractor(s), the project, each Work Area, and worker respiratory protection employed. The job supervisor shall be responsible for the maintenance of the log during the abatement activity. The log shall be submitted to the NYC DDC within 48 hours of request.
- B. Each worker shall remove street clothes in the clean room; wear two disposable suits, including gloves, hoods and non-skid footwear; and put on a clean respirator (with new filters) before entering the Work Area.
- C. Each worker shall, before leaving the Work Area or tent, clean the outside of the respirators and outer layer of protective clothing by wet cleaning and/or HEPA-vacuuming. The outer disposable suit shall be removed in the airlock prior to proceeding to the Worker Decontamination Unit. The inner disposable suit and respirator shall be wet wiped and HEPA vacuumed thoroughly before removing and prior to aggressive shower.
- D. Following showering and drying off, each worker or authorized visitor shall proceed directly to the clean room, dress in street clothes, and exit the decontamination enclosure system immediately.



3.04 PERSONNEL ENTRANCE AND DECONTAMINATION PROCEDURES FOR REMOVAL OPERATIONS UTILIZING ATTACHED DECONTAMINATION FACILITIES

- A. All workers and authorized visitors shall enter the Work Area through the worker decontamination facility.
- B. All individuals who enter the Work Area shall sign the entry log, located in the clean room, upon each entry and exit. The log shall be permanently bound and shall identify fully the facility, agents, asbestos abatement contractor(s), the project, each Work Area and worker respiratory protection employed. The site supervisor shall be responsible for the maintenance of the log during the abatement activity. The log shall be submitted to the NYC DDC within 48 hours of request.
- C. Each worker or authorized visitor shall, upon entering the job site, remove street clothes in the clean room and put on a clean respirator with filters, and clean protective clothing before entering the Work Area through the shower room and equipment room.
- D. Each worker or authorized visitor shall, each time he leaves the Work Area, remove gross contamination from clothing before leaving the Work Area; proceed to the equipment room and remove clothing except the respirator; still wearing the respirator, proceed to the shower room; clean the outside of the respirator with soap and water while showering; remove filters, wet them, and dispose of them in the container provided for that purpose; wash and rinse the inside of the respirator; and thoroughly shampoo and wash himself/herself.
- E. Following showering and drying off, each worker or authorized visitor shall proceed directly to the clean room, dress in street clothes, and exit the decontamination enclosure system immediately. Disposable clothing of the type worn inside the Work Area is not permitted outside the Work Area.

3.05 MAINTENANCE OF DECONTAMINATION ENCLOSURE FACILITIES AND BARRIERS

The following procedures shall be followed during abatement activities.

- A. All polyethylene barriers inside the work place and partitions constructed to isolate the Work Area from occupied areas shall be inspected by the asbestos handler supervisor at least twice per shift.
- B. Smoke tubes shall be used to test the integrity of the Work Area barriers and the decontamination enclosure systems daily before abatement activity begins and at the end of each shift.



- C. Damage and defects in the decontamination enclosure system shall be repaired immediately upon discovery. The decontamination enclosure system shall be maintained in a clean and sanitary condition at all times.
- D. At any time during the abatement activity, if visible emissions are observed, or elevated asbestos fiber counts outside the Work Area are measured, or if damage occurs to barriers, abatement shall stop. The source of the contamination shall be located, the integrity of the barriers shall be restored and extended to include the contaminated area, and visible residue shall be cleaned up using appropriate HEPA-vacuuuming and wet cleaning.
- E. Inspections and observations shall be documented in the daily project log by the asbestos handler supervisor.
- F. The daily inspection to ensure that exits have been checked against exterior blockage or impediments to exiting shall be documented in the log book. If exits are found to be blocked, abatement activities shall stop until the blockage is cleared.

3.06 MODIFICATIONS TO HVAC SYSTEMS

- A. Shut down, isolate or seal, all existing HVAC units, fans, exhaust fans, perimeter convection air units, supply and/or return air ducts, etc., situated in, traversing or servicing the work zone.
- B. Seal all seams with duct tape. Wrap entire duct with a minimum of two layers of fire retardant 6-mil polyethylene sheeting. All shutdowns are to be coordinated with the Facility. Where systems must be maintained, i.e., traversing Work Areas to non-Work Areas, only supply ducts will be maintained, protect as described above. All returns must be blanked off in Work Area and adjacent areas, including floor above and below Work Area. When required Asbestos abatement contractor shall apply for a clarification from NYCDEP. The Asbestos abatement contractor shall implement the following engineering procedures:
 - 1. Maintenance of a positive pressure within the HVAC system of 0.01 inch water gauge (or greater) with respect to the ambient pressure outside the Work Area. The conditions for this system shall be maintained and be operational 24 hours per day from the initiation of Work Area preparation until successful final air clearance. Positive pressurization of HVAC system shall be applied only under the direction and control of professional engineer, or other knowledgeable licensed professional;
 - 2. The positive pressurization of the duct shall be tested, inspected and recorded both at the beginning and at the end of each shift;



3. The positive pressurization shall be monitored using instrumentation which will provide a written record of pressurization and that will trigger an audible alarm, if the static pressure falls below the set value;
 4. The supply air fan and the supply air damper for the active positive-pressurized duct shall be placed in the manual “on” positions to prevent shutdown by fail-safe mechanisms;
 5. The return air fan and the return air dampers shall be shut down and locked-out;
 6. All the seams of the HVAC ducts that pass through the Work Area shall be sealed;
 7. The HVAC ducts that pass through the Work Area shall be covered with two (2) layers of fire retardant 6-mil polyethylene sheeting, and all seams and edges of both layers shall be sealed airtight;
 8. The supply air fans, return air fans, and all dampers servicing the Work Area itself shall be shut down and locked-out. All openings within the Work Area of supply and return air ducts shall be sealed with 3/8-inch fire rated plywood and two layers of fire retardant 6-mil polyethylene;
 9. When abatement occurs during periods while the HVAC system is shut down an alternative method of pressurization of the duct passing through the Work Area should be employed (e.g., by low-pressure “blowers”, etc., directly coupled into the duct). Item #4 above shall be deleted and shall be replaced by the requirement to set the dampers of the HVAC duct in the manual closed positions, in order to effect pressurization.
- C. Asbestos abatement contractor to coordinate this item with the Facility and Construction Project Manager at the commencement of work. Where present HVAC systems (ducts) service an area and that air system cannot be shut down, asbestos abatement contractor shall isolate and seal the ducts, both supply and return, at the boundary of that zone.
1. To isolate, cap, or seal a duct, the asbestos abatement contractor shall remove insulation from duct (if necessary), then disconnect linkage to fold shut all fire dampers. Asbestos abatement contractor shall seal all edges and seams with caulk and duct-tape.
 2. Asbestos abatement contractor shall then cut existing duct and fold metal in and secure with approved fasteners. Asbestos abatement contractor shall caulk and duct-tape all seams and edges.



3. All ducts shall then be completely wrapped and sealed with duct-tape and three (3) layers of reinforced polyethylene sheeting.
 4. All ducts shall be restored to original working order at the end of the project.
- D. Where present HVAC systems (ducts) service occupied areas (non-Work Areas), the Asbestos abatement contractor shall blank off the ducts.
1. To isolate or seal the return duct, the asbestos abatement contractor shall remove any insulation (if necessary) from the duct. Then disconnect linkage to fold shut all fire dampers and insert a fiberglass board within the duct. Asbestos abatement contractor shall seal all edges and seams with caulk, duct-tape and three (3) layers of reinforced polyethylene sheeting.
 2. All isolation of return ducts and any other activity that requires removal of ceiling by the asbestos abatement contractor shall be conducted under controls. Work is to be coordinated with the Construction Project Manager and the Facility and is described as follows:
 - a. Work shall occur as scheduled.
 - b. Horizontal surfaces near the blanking operations shall be protected with fire retardant 6-mil polyethylene sheeting.
 - c. Plastic drapes shall be used to enclose the immediate area.
 - d. Asbestos abatement contractor to position and operate air filtration devices and HEPA-vacuums in the area to clean space after blanking operations.
 - e. All personnel involved with this work shall receive personal protection (i.e., respirators and disposable suits).
- E. Upon loss of negative pressure or electric power, all work activities in an area shall cease immediately and shall not resume until negative pressure and/or electric power has been fully restored. When a power failure or loss of negative pressure lasts, or is expected to last, longer than thirty (30) minutes, the following sequence of events shall occur.
1. All make up air inlets shall be sealed airtight.
 2. All decontamination facilities shall be sealed airtight after evacuation of all personnel from the Work Area.



3. All adjacent areas shall be monitored for potential fiber release upon discovery of and subsequently throughout, power failure.

3.07 LOCKOUT OF HVAC SYSTEMS, ELECTRIC POWER, & ACTIVE BOILERS

Prior to the start of any prep work, the asbestos abatement contractor shall employ skilled tradesmen with limited asbestos licenses for the following work:

- A. Disable all ventilating systems or other systems bringing air into or exhausting air out of the Work Area. Disable system by disconnecting wires removing circuit breakers, by lockable switch or other positive means to ensure against accidental re-starting of equipment.
- B. Lock out power to the Work Area by switching off all breakers and removing them from panels or by switching and locking entire panel. Label panel with following notation: "DANGER CIRCUIT BEING WORKED ON". Give all keys to Facility.
- C. Lock out power to circuits running through Work Area whenever possible by switching off and removing breakers from panel. If circuits must remain live, the Facility shall notify asbestos abatement contractor in order that he may secure a variance from NYCDEP. The asbestos abatement contractor shall protect all conduit and wires to remain and label all active circuits at intervals not to exceed 3 feet with tags having the following notation: "DANGER LIVE ELECTROCUTION HAZARD". The asbestos abatement contractor shall label all circuits in all locations including hidden locations that may be affected by the work in a similar manner.
- D. All boilers and other equipment within the work area shall be shut down, locked out, tagged out and the burner/boiler/equipment accesses and openings shall be sealed until abatement activities are complete. If the boiler or other exhausted equipment will be subject to abatement, all breeching, stacks, columns, flues, shafts, and double-walled enclosures serving as exhausts or vents shall be segregated from the affected boiler or equipment and sealed airtight to eliminate potential chimney effects within the work area.

PART 4 – PREPARATION OF WORK AREA AND REMOVAL PROCEDURES

4.01 REMOVAL OF ASBESTOS-CONTAINING MATERIAL

- A. Asbestos abatement contractor Responsibility

Asbestos abatement contractor shall be responsible for the proper removal of ACM from the Work Area using standard industry techniques. The Third-Party Air Monitor representative shall observe the Work.



1. General Requirements:
 - a. Removal of ACM shall be performed using wet methods. Dry removal of ACM is prohibited.
 - b. Spray ACM with amended water with sufficient frequency and quantity to enhance penetration. Sufficient time shall be allowed for amended water to penetrate the material to the substrate prior to removal. All ACM shall be thoroughly wetted while work is being conducted.
 - c. Accumulation of standing water on the floor of the Work Area is prohibited.
 - d. Apply removal encapsulants, when used, in accordance with the manufacturer's recommendations and guidelines.
 - e. Containerize ACM immediately upon detachment from the substrate. Alternately, ACM may be dropped in to a flexible catch basin and promptly bagged. Detached ACM is not permitted to lie on the floor for any period of time. Excess air within the bag shall be removed before sealing. ACM shall not be dropped from a height of greater than 10 feet. Above 10 feet, dust free inclined chutes may be used. Maximum inclination from horizontal shall be 60-degrees for all chutes.
 - f. Exits from the work area shall be maintained, or alternative exits shall be established, in accordance with section 1027 of the New York City Fire Code. Exits shall be checked at the beginning and end of each work shift against blockage or impediments to exiting.
 - g. Signs clearly indicating the direction of exits shall be maintained and prominently displayed within the work area.
 - h. No smoking signs shall be maintained and prominently displayed within the work place.
 - i. At least one fire extinguisher with a minimum rating 2-A:10-B:C shall be required for each work place. In the case of large asbestos projects, at least two such fire extinguishers shall be required.
 - j. If the containment area of an asbestos project covers the entire floor of the affected building, or an area greater than 15,000 square feet on any given floor, the installation of a negative air cut off switch or switches shall be required at a single location outside the work place,



such as inside a stairwell, or at a secured location in the ground floor lobby when conditions warrant. The required switch or switches shall be installed by a licensed electrician pursuant to a permit issued by the Department of Buildings. If negative pressure ventilation equipment is used on multiple floors the cut off switch shall be able to turn off the equipment on all floors.

B. Removal of ACM Utilizing Full Containment Procedures shall be as follows:

1. Preparation Procedures:

- a. Ensure that the Third-Party Air Monitor has performed area monitoring and established a background count prior to the preparatory operations for each removal area, as applicable.
- b. Shut down, isolate, and lock out or tag heating, ventilating, and air conditioning (HVAC) systems which serve or which pass through the Work Area. Vents within the Work Area and seams in HVAC components shall be sealed with tape and two layers of fire retardant polyethylene sheeting. Filters in HVAC systems shall be removed and treated as asbestos-asbestos contaminated waste.
- c. Shut down, disconnect, and lock out or tag all electric power to the Work Area so that there is no possibility of its reactivation until after clearance testing of the Work Area.
- d. Provide and install decontamination enclosure systems in accordance with Sections 3.01 and 3.02 of this Section.
- e. Remove ACM that may be disturbed by the erection of partitions using tent procedures and wet removal methods. Removal shall be limited to a one-foot wide strip running the length/height of the partition.
- f. Pre-clean and remove moveable objects from the Work Area. Pre-cleaning shall be accomplished using HEPA-vacuum and wet-cleaning techniques. Store moveable objects at a location determined by the City.
- g. Protect carpeting that will remain in the Work Area.
 - (1) Pre-clean carpeting utilizing wet-cleaning techniques.
 - (2) Install a minimum of two layers of fire retardant 6-mil reinforced polyethylene sheeting over carpeting.



- (3) Place a rigid flooring material, minimum thickness of 3/8-inch, over polyethylene sheeting.
- h. Pre-clean all fixed objects to remain within the Work Area using HEPA-vacuum and wet-cleaning techniques.
- i. Seal fixed objects with two individual layers, minimum, of 6-mil fire retardant polyethylene sheeting.
- j. Pre-clean entire Work Area utilizing HEPA-vacuum and wet-cleaning techniques. Methods of cleaning that raise dust; such as dry sweeping or use of vacuum equipment not equipped with HEPA-filters, is prohibited.
- k. Install isolation barriers (i.e., sealing of all openings, including but not limited to windows, corridors, doorways, skylights, ducts, grills, diffusers, and other penetrations within the Work Area) using two layers of 6-mil fire retardant polyethylene sheeting and duct-tape.
- l. Construct rigid framework to support Work Area barriers.
 - (1) Framework shall be constructed using 2-inch by 4-inch wooden or metal studs placed 16 inch on center when existing walls and/or ceiling do not exist for all openings greater than 32 square feet. Framework is not required except where one dimension is one foot or less or the opening will be used as an emergency exit.
 - (2) Apply a solid construction material, minimum thickness of 3/8-inch to the Work Area side of the framing. In secure interior areas, not subject to access from the public or building occupants, an additional layer of 6-mil fire retardant polyethylene sheeting may be substituted for the rigid construction material.
 - (3) Caulk all wall, floor, ceiling, and fixture joints to form a leak tight seal.
- m. Seal floor drains, sumps, shower tubs, and other collection devices with two layers of 6-mil fire retardant plastic and fire rated plywood, as necessary, and provide a system to collect all water used by the asbestos abatement contractor. Collected water shall be passed through a water filtration system prior to being discharged into the sanitary sewer.



- n. Remove ceiling mounted objects not previously sealed that will interfere with removal operations. Mist object and surrounding ACM with amended water prior to removal to minimize fiber dispersal. Clean all moveable objects using HEPA-vacuum and wet-cleaning techniques prior to removal from the Work Area.
- o. Fiberglass insulation with intact coverings shall be protected in place during abatement activities. These materials shall be protected with two layers of 6-mil fire retardant polyethylene sheeting as isolation barriers and two additional layers of 6-mil fire retardant polyethylene sheeting serving as primary and secondary surface barriers.
- p. Install and initiate operation of AFDs to provide a negative pressure and a minimum of four air changes per hour within the Work Area relative to surrounding non-Work Areas. Do not shut down AFDs until the Work Area is released to the City following final clearance procedures. The use of HEPA-filtered vacuum to produce a negative air pressure inside the enclosure is prohibited.
- q. Maintain emergency and fire exits from the Work Areas or establish alternative exits satisfactory to the local fire officials. Emergency exits and routes shall be established and clearly marked with florescent paint or other effective designations to permit easy location from anywhere within the Work Area. Cutting tools (e.g., knife, razor) shall be attached to the work area side of the sheeting for use in the event that the barrier must be cut open to allow egress. Emergency exits shall be secured to prevent access from uncontaminated areas and yet permit emergency exiting. Exits shall be checked daily against exterior blockage or impediments to exiting.
- r. Temporary lighting within the Work Area and decontamination system shall be provided as required to achieve minimum illumination levels.
- s. Hand power tools used to drill, cut into, or otherwise disturb ACM shall be manufacturer-equipped with HEPA filtered local exhaust ventilation.
- t. Prior to being plasticized, the Work Areas shall be cleaned using HEPA vacuum equipment and/or wet cleaning methods as appropriate. Methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters, shall not be used.



- u. Plasticize the area after pre-cleaning, using the following procedures.
 - (1) Cover floors with one layer of 6-mil fire retardant polyethylene sheeting, turning layer a minimum of 6 inches up wall, and seal layer to wall.
 - (2) Cover walls with one layer of 6-mil fire retardant polyethylene sheeting, overlapping wall layer a minimum of 6 inches, and seal layer to floor layer.
 - (3) Cover floors with a second layer of 6-mil fire retardant polyethylene sheeting, turning layer a minimum of 12 inches up wall, and seal layer to wall.
 - (4) Cover walls with a second layer of fire retardant 6-mil polyethylene sheeting, overlapping wall layer a minimum of 12 inches, and seal layer to floor layer.
 - (5) In areas where demolition is required to access ACM, a layer of fire retardant 6-mil reinforced polyethylene sheeting shall be placed on the floor of the enclosure.
 - (6) Perform demolition required to access ACM. Debris resulting from demolition activities shall be disposed of as ACM waste as described in this Specification.
 - (7) Repeat preparation of areas accessed by demolition activities as described above.
- v. Suspended ceiling tiles and T-grid components shall remain in place until the preparation of the Work Area below the ceiling tiles are completed and personnel and equipment decontamination enclosures have been constructed.
- w. Scaffolds shall be provided for workers engaged in work that cannot safely be performed from the ground or other solid Work Area surface.
- x. Means of egress shall not be obstructed by hardwall barriers.
- y. Pre-Removal Inspections.
 - (1) Prior to removal of any ACM, the asbestos abatement contractor shall notify the Third-Party Air Monitor and request a pre-removal inspection. Posting of warning signs, building of decontamination enclosure systems, and all other preparatory



steps have been taken prior to notification of the Third-Party Air Monitor.

- (2) Asbestos abatement contractor shall correct any deficiencies observed by Third-Party Air Monitor at no additional cost to City.
- (3) Following the Third-Party Air Monitor's approval of the Work Area preparations, removal of ACM may commence.

2. Removal of ACM Within Full Containment:

- a. Mist material with amended water. Allow sufficient time for the amended water to penetrate the material to be removed.
- b. Remove the material using hand tools such as scrapers or putty knives. Wire-mesh or wood lathe reinforcing, when present, shall be cut into manageable pieces and disposed of as ACM.
- c. Remove any residual material from the substrate using wet cleaning methods and nylon-bristled hand brushes.
- d. Place the removal material immediately into a properly labeled fire retardant 6-mil polyethylene bag. All material shall be properly containerized and decontaminated prior to removal from the Work Area.
- e. Following the completion of removal of insulation, all visible residue shall be removed from the substrate.

3. Following Removal of ACM utilizing Full Containment Procedures:

- a. First Cleaning:
 - (1) Remove any visible accumulation of asbestos material and debris. HEPA-vacuums and wet cleaning shall be performed on all surfaces inside the Work Area. All sealed drums, plastic bags, and equipment used in the Work Area shall be removed from the Work Area.
 - (2) Upon request of the asbestos abatement contractor, the Third-Party Air Monitor will perform a visual inspection. Evidence of asbestos contamination identified during the inspection will necessitate further cleaning as heretofore specified.



- (3) Remove first layer of plastic sheathing inside the Work Area. The isolation barriers and decontamination facility shall remain in place and be utilized.
- b. Second Cleaning:
- (1) After the first cleaning, the Work Area shall be vacated for twelve hours to allow fibers to settle.
 - (2) All objects and surfaces in the Work Area shall be HEPA - vacuumed and wet cleaned for a second cleaning.
 - (3) A thin coat of lockdown encapsulant shall be applied to all plastic covered surfaces in the Work Area.
 - (4) When the encapsulant is dry, second layer of polyethylene sheeting on the walls, ceiling and floors shall be removed. Do not remove seals from doors, windows, Isolation Barriers or disconnect the negative pressure equipment.
- c. Third Cleaning:
- (1) A minimum of four hours after the second cleaning, all the surfaces in the Work Area shall be HEPA-vacuumed and wet cleaned for a third cleaning.
 - (2) Upon the request of the asbestos abatement contractor, the Third-Party Air Monitor will do final visual inspection for re-occupancy. Evidence of asbestos contamination identified during the inspection will necessitate further cleaning as heretofore specified.
 - (3) When the Work Area passes the Third-Party Air Monitor's visual re-occupancy inspection, air sampling shall not begin until at least one hour after the completion of the third cleaning. The Third-Party Air Monitor shall perform air monitoring using aggressive testing techniques. The Third-Party Air Monitor will approve re-occupancy if the specified fiber count in the Work Area is achieved according to the Third-Party Air Monitor.
 - (4) When the Work Area passes the re-occupancy test, all controls and seals established shall be removed.
 - (5) The cleaned layer of the surface barriers shall be removed from walls and floors.



- (6) The isolation barriers shall remain in place throughout cleanup. Decontamination enclosure systems shall remain in place and be utilized. A thin coat of lockdown encapsulant shall be applied to all surfaces in the work area which were not the subject of removal or abatement, including the cleaned layer of the surface barriers, but excepting sprinklers, standpipes, and other active elements of the fire suppression system.
 - d. Final Barrier Removal:
 - (1) Upon receipt of acceptable clearance testing results, polyethylene sheeting and Isolation Barriers shall be removed and disposed accordingly as asbestos-containing material.
 - (2) The area surrounding the abatement work place shall be cleaned of any visible debris utilizing HEPA vacuum and wet methods.
 - e. The Third-Party Air Monitor will conduct a final visual observation. Approval must be granted prior to break down of decontamination facility and asbestos abatement contractor demobilization.
- C. Removal of ACM from Vertical Exterior Surfaces utilizing NYCDEP Title 15, Chapter 1 §1-109 Abatement from Vertical Exterior Surfaces procedures shall be as follows:
1. Preparation procedures:
 - a. This procedure shall apply to the abatement of asbestos-containing materials from vertical exterior surfaces such as, but not limited to caulking or glazing compounds, asphaltic materials or tar, cement siding or shingles (including transite), paints, sealants coping stone caps or clay roof tiles.
 - b. The entire surface to be abated and ground-level perimeter shall be considered the work area unless partitions and warning tape are used to define the work area.
 - c. A restricted area shall be established using warning tape extending at least 25 feet from the affected areas of the building or to the nearest vertical obstruction or the curb.
 - d. The restricted area may be entered only by certified workers or authorized visitors.



- e. Before plasticizing, the restricted area shall be inspected for ACM debris and, if necessary, pre-cleaned using HEPA vacuums and wet methods.
- f. All openings to the building or structure's interior which are within 25 feet of the affected ACM shall be closed and sealed.
- g. Scaffolding erected to access the ACM shall be constructed, maintained, and used in accordance with applicable federal, state, and city laws.
- h. Horizontal surfaces beneath the affected ACM shall be covered with two layers of fire-retardant 6-mil plastic to a width of six feet.
- i. Elevated platforms being used to access the affected ACM shall be plasticized with two layers of fire-retardant 6-mil plastic, which shall extend up from the platform to at least the height of the mid-rail on three sides, and shall be attached directly to the building just below the surfaces under abatement.
- j. The ground-level restricted area shall be cleared of all moveable objects and plasticized with two sheets of fire-retardant 6-mil plastic, which shall be extended one foot up the side of the building. The plasticized area shall be ten feet wide for every floor up to a maximum width of thirty feet, or to the curb. This plastic shall be cleaned, replaced, and disposed of as asbestos waste at the end of each shift.
- k. Sidewalk bridges in the restricted area shall be covered with two layers of fire retardant 6-mil plastic, placed over and secured to the bridge, spread across the full width, draped over the side to ground level, and extended to a width of at least thirty feet.
- l. Establish a remote decontamination unit in accordance with Section 3.01 within the restricted area.
- m. Construct all elevated work platforms a minimum of one foot below the surface to be abated.
- n. Pre-Removal Inspections
 - (1) Prior to removal of any ACM, the asbestos abatement contractor shall notify the Project Monitor and request a pre-removal inspection. Posting of warning signs, building of decontamination enclosure systems, and all other preparatory



steps have been taken prior to notification of the Third-Party Air Monitor.

- (2) Asbestos abatement contractor shall correct any deficiencies observed by Third-Party Air Monitor at no additional cost to City.
- (3) Following the Project Monitor's approval of the Work Area preparations, removal of ACM may commence.

2. Removal of ACM Materials:

- a. Mist material with amended water. Allow sufficient time for the amended water to penetrate the material to be removed.
- b. Remove the caulk using hand tools such as knives or scrapers.
- c. Exercise caution when removing caulking material to prevent damage to windows or skylight openings.
- d. Remove any residual asbestos-containing caulking material from the substrate using wet cleaning methods and nylon-bristled hand brushes. The use of metal bristled brushes is prohibited.
- e. Place the removed material immediately into a properly labeled 6-mil polyethylene bag. All material shall be properly containerized and decontaminated prior to removal from the Work Area.
- f. Following the completion of removal of caulking, all visible residues shall be removed from the substrate.
- g. Air sampling shall be conducted in compliance with NYC DEP Title 15 Chapter 1, §1-41 Air Sampling Schedule. This sampling shall be performed by the Third Party Air Monitoring Firm.

3. Following Removal of ACM :

- a. The stripped substrate shall be HEPA vacuumed and wet-wiped.
- b. A visual clearance inspection shall be conducted by the asbestos handler supervisor and project monitor after the work area dries, to ensure the absence of ACM residue or debris in the work area.
- c. After the inspection is completed, the warning tapes and barriers may be removed.



- d. The clearance inspection shall be documented in the log and the project air sampling log.
- e. Air monitoring shall be conducted in accordance with relevant provisions.
- f. Asbestos abatement contractor shall request and pass a visual inspection performed by the consultant before proceeding to the next step. Documentation of passing this inspection shall be recorded in a daily logbook.
- g. The Third-Party Air Monitor will conduct a visual observation of the Work Area to verify the absence of asbestos-containing waste materials.
- h. If the Work is accepted by the Third-Party Air Monitor based on the inspection, asbestos abatement contractor shall be notified. Conduct the following activities in accordance with the contract and all applicable laws, codes, rules and regulations:
 - (1) All waste shall be removed from the Work Area and holding areas.
 - (2) All tools and equipment are to be removed and decontaminated in the decontamination enclosure system.
- i. If the Work is not approved, the Third-Party Air Monitor will inform Asbestos abatement contractor who will then HEPA-vacuum and/or wet-clean the Work Area. The Third-Party Air Monitor will then perform a subsequent visual observation. This process will continue until the Third-Party Air Monitor accepts the Work Area as clean.
- j. Final Barrier Removal
 - (1) Upon receipt of acceptable observation results, polyethylene sheeting and barrier tape shall be removed and disposed accordingly as ACM.
 - (2) The area surrounding the abatement work place shall be cleaned of any visible debris utilizing HEPA vacuum and wet methods.



The Third-Party Air Monitor will conduct final visual inspection. Approval must be granted prior to break down of decontamination facility and asbestos abatement contractor demobilization. Other Information: Extra time required to clean Work Areas in order to achieve clearance criteria shall not be considered grounds for an extension of time for contract completion.

4.02 MAINTENANCE OF CONTAINED WORK AREA AND DECONTAMINATION ENCLOSURE SYSTEMS

- A. Ensure that barriers are installed in a manner appropriate to the expected weather conditions during the project and for its duration. Repair damaged barriers and remedy defects immediately upon their discovery. Visually inspect barriers at the beginning and end of each work period.
- B. Visually inspect non-Work Areas and the decontamination enclosure system for water leakage. Check the floor below, ceiling and walls, and view beneath/or around the decontamination enclosure system, for signs of leakage. Perform the visual inspection a minimum of two times for each 8-hour work shift.

PART 5 – ASBESTOS WASTE MANAGEMENT

5.01 ACM WASTE REQUIREMENTS

- A. The asbestos abatement contractor and all sub-asbestos abatement contractors are specifically alerted to the illegal practice of combining asbestos-containing waste (ACW) from one project with the ACW of other projects without using the services of a permitted waste transfer station as defined by 6 NYCRR Part 360 and 364. As part of the shop drawing submittals, the Asbestos abatement contractor must submit for approval the proposed method of transportation and disposal that will be utilized to manage the ACW of this Contract. If a permitted transfer station is to be used, the cost shall be included in the work. The asbestos abatement contractor must submit a waste manifest consistent with whatever approved method is utilized as part of the invoicing and payment procedures.
- B. The asbestos abatement contractor shall maintain compliance with the strictest set of regulations of Title 15, Chapter 1 of RCNY, NYC LL 70/85, NYS DOL ICR 56, USEPA, Asbestos Regulation 40 CFR Section 61.152, 29 CFR 1926.1101, 29 CFR 1910.1200 (F) of OSHA’s Hazard Communication Standards, and other applicable standards.

NOTE: Any penalties incurred for failure to comply with any of the above regulations will be the sole responsibility for fines imposed due to negligence of the Asbestos abatement contractor.



- C. When presenting ACW for storage at the generation site, the Asbestos abatement contractor shall:
 - 1. Wet down ACW in a manner sufficient to prevent all visible emissions of dust into the air.
 - 2. Seal material in a leak tight container while wet.
 - 3. Keep ACW separate from any other waste.

- D. When presenting ACW for storage away from the site of generation, the Asbestos abatement contractor shall:
 - 1. Ensure that ACW has been properly packaged as per requirements above.
 - 2. Examine the containers of ACW to ensure that there are no breaks in the containers and that no visible dust is being released into the air.
 - 3. If examination reveals damage to a container of ACW the Asbestos abatement contractor or person accepting the waste shall immediately wet down the ACW and repackage it into a clean leak tight container. The subsequent repackaging shall be the financial responsibility of the Asbestos abatement contractor and occur at no extra cost to the City.
 - 4. Keep ACW separate from any other waste.

- E. When storing ACW – The Asbestos abatement contractor shall:
 - 1. Ensure that the ACW has been sufficiently wetted down in tight containers.
 - 2. Re-wet and repackage any damaged containers.
 - 3. Maintain at storage site an adequate supply of spare leak tight containers.
 - 4. Maintain at storage site an adequate supply of amended water.
 - 5. Keep ACW separate from any other waste.
 - 6. Keep ACW in a secured, enclosed, and locked container.
 - 7. If the Asbestos abatement contractor has intention of sorting a quantity of ACW greater than or equal to 50 cubic yards, the Asbestos abatement contractor shall:
 - a. Submit a written request and receive written approval from the City.



- F. When presenting for transport, the Asbestos abatement contractor shall:
1. Ensure that ACW has been sufficiently wetted down.
 2. Examine the integrity of the container's airtight seal.
 3. Re-wet and repackage any damaged containers.
 4. Keep ACW separate from all other waste.
 5. Ensure that a person transporting asbestos waste holds a valid permit issued pursuant to law.
 6. Frequency of Waste Removal:
 - a. Properly packaged and labeled asbestos waste shall be removed from the site on a daily basis. Under no circumstance shall asbestos waste be stored on site without written approval from the City. The Waste Hauler and landfill shall be as indicated on the notifications to regulatory agencies.
- G. Waste Load-out Through Equipment Decontamination Enclosure (Full Decontamination Facility): Place asbestos waste in disposal bags. Large items not able to fit into disposal bags shall be wrapped in one layer of 6-mil thick polyethylene sheeting. Clean outer covering of asbestos waste package by wet cleaning and/or HEPA-vacuuming in a designated part of the Work Area. Move wrapped asbestos waste to the equipment washroom, wet clean each bag or object and place it inside a second disposal bag, or a second layer of 6-mil polyethylene sheeting, as the item's physical characteristics demand. Air volume shall be minimized, and the bags or sheeting shall be sealed airtight with tape.
1. The clean containerized items shall be moved to the equipment decontamination enclosure holding area pending load-out to storage or disposal facilities.
 2. Workers who have entered the equipment decontamination enclosure system from the uncontaminated non-Work Area shall perform load-out of containers from the decontamination enclosure holding area. Dress workers moving asbestos waste to storage or disposal facilities in clean overalls of a color different than from that of coveralls used in the Work Area. Ensure that workers do not enter from uncontaminated areas into the equipment washroom or the Work Area. Ensure that contaminated workers do not exit the Work Area through the equipment decontamination enclosure system.



3. Thoroughly clean the equipment decontamination enclosure system immediately upon completion of the waste load-out activities, and at the completion of each work shift.
 4. Labeled ACM waste containers or bags shall not be used for non-ACM debris or trash. Any materials placed in labeled containers or bags, including those turned “inside-out”, shall be handled and disposed of as ACM waste.
- H. All asbestos materials, wastes, shower water, polyethylene, disposable equipment and supplies shall be disposed of as asbestos contaminated waste, in accordance with the EPA regulation (40 CFR, Section 61.150) and those requirements of the New York Department of Environmental Conservation and New York City Department of Sanitation.
- I. All asbestos materials shall be prepared for transportation in accordance with this specification and all applicable Federal, State, County and City Regulations. asbestos abatement contractor shall submit the following documentation:
1. Where applicable, an EPA Generator's identification number which has been obtained from the EPA for all asbestos waste generated from the project.
 2. Applicable State Waste Hauler license and registration numbers.
 3. Federal Hazardous Materials Waste Hauler number.
 4. Designated landfill EPA Permit numbers.
- J. Prior to loading asbestos waste the enclosed cargo areas (dumpster) shall be prepared as follows:
1. Clean via HEPA-vacuum and wet wipe techniques the enclosed cargo areas of all visible debris prior to preparing with polyethylene.
 2. Line the cargo area with two layers of 6-mil polyethylene sheeting to prevent contamination from damaged or leaking containers. Floor sheeting shall be installed first and extend up the walls a minimum of 24-inches. Wall sheeting shall be overlapped and taped securely into place.
- K. Asbestos-containing waste shall be placed on level surfaces in the cargo area of the dumpster and shall be packed tightly to prevent any shifting or tipping of the waste during transportation.
- L. Asbestos-containing waste shall not be thrown into or dropped from the dumpster. All material shall be handled carefully to prevent rupture of the containers.



- M. All personnel engaged in handling and loading of asbestos contaminated waste outside of the Work Area shall wear protective clothing. The disposable clothing shall include head, body and foot protection and color of clothing shall be different from abatement personnel in the Work Area. Minimum respiratory protection shall be half face, dual cartridge, air purifying respirators with HEPA-filters.

- N. Asbestos abatement contractor shall immediately clean debris or residue observed on containers or surfaces outside of the Work Area. Cleaning shall be via HEPA equipped wet/dry vacuums only.

- O. All asbestos-containing waste shall be transported from the abatement site to the landfill by a registered Waste Hauler. When transporting ACW:
 - 1. Ensure that the ACW has been sufficiently wetted down in a leak tight container.
 - 2. Re-wet and repackage any damaged containers.
 - 3. Maintain at storage site an adequate supply of spare leak tight containers.
 - 4. Maintain at storage site an adequate supply of amended water.
 - 5. Keep ACW separate from any other waste.

- P. Keep ACW in a secured, enclosed, and locked container.

- Q. Waste transport documents shall conform to the requirements of the U.S. Department of Transportation, Hazardous Materials Transportation Regulation, 49 CFR Part 173 and EPA 40 CFR 61.150 (d)(1)(2). Shipping documents shall be clearly marked with the required designation "RQ Asbestos". Asbestos abatement contractor shall provide a copy of this document to the City.

- R. A uniform hazardous waste manifest shall be prepared by the asbestos abatement contractor and signed by the asbestos abatement contractor each time the asbestos abatement contractor ships a dumpster load of Asbestos-Containing Waste Material. The uniform hazardous waste manifest shall include the site of waste generation, the names and addresses of the Transporter, the asbestos abatement contractor, and the landfill operator with information on the type and number of asbestos-waste containers, time and date. Asbestos abatement contractor shall provide the Construction Project Manager, Third-Party Air Monitor or authorized designated representative with signed copies of the waste manifest before each departure.



- S. Asbestos abatement contractor or his registered hazardous Waste Hauler shall transport asbestos-containing waste material from the abatement site directly to the specified disposal site. Asbestos abatement contractor or their Waste Hauler shall not accept material from any other site when transporting asbestos-containing waste material from the abatement site. The authorized DDC representative or Construction Project Manager reserves the right to travel with asbestos abatement contractor's Waste Hauler to the waste disposal site. No intermediate storage of waste material (i.e., asbestos abatement contractor's warehouse) shall be permitted.
- T. Final or progress application for payments will not be processed unless all hazardous waste manifests generated to date have been received and reviewed by the Construction Project Manager.
- U. All asbestos materials, wastes, shower water, polyethylene disposable equipment and supplies shall be disposed of as asbestos contaminated waste, in accordance with the EPA regulation (40 CFR, Section 61.150) and those requirements of the New York State Department of Environmental Conservation and the New York Department of Sanitation.
- V. Asbestos abatement contractor shall transport all sealed drums to a landfill disposal site approved by the Department of Environmental Conservation and the EPA. Transportation shall be performed by a New York State registered Waste Hauler, where required. When presenting the ACW for disposal the Asbestos abatement contractor or sub Asbestos abatement contractor shall:
 - 1. Ensure that waste container is properly labeled according to the National Emission Standard for Hazardous Air Pollutants (NESHAP); Asbestos Revision, 40 CFR, Part 61, Subpart M. The labels shall include the name of the waste generator and the location where the waste was generated.
 - 2. Comply with all applicable orders issued pursuant to asbestos disposal.
 - 3. Ensure that ACW has been sufficiently wetted down.
 - 4. Re-wet and repackage any damaged containers.
 - 5. Keep ACW separate from all other wastes.
- W. Asbestos abatement contractor shall notify the waste disposal site, at least 24 hours prior to transportation of asbestos contaminated waste to be delivered. Asbestos abatement contractor shall determine if a larger notification period is required.
- X. At the site asbestos abatement contractors or Waste Hauler trucks shall approach the dump location as close as possible for unloading asbestos waste. Containers shall be carefully placed in the ground. Do not throw containers from truck.



- Y. Asbestos abatement contractor or Waste Hauler shall inspect containers as they are unloaded at the disposal site. Material in damaged containers shall be repacked in empty containers, as necessary.
- Z. Asbestos abatement contractor or Waste Hauler shall not remove asbestos-containing waste Material from drums unless required to do so by the disposal site City. Used drums shall be disposed of as asbestos-asbestos contaminated waste.
- AA. All personnel engaged in unloading of the containers at the waste site shall wear protective clothing. The disposable clothing shall include head, body and foot protection. Minimum respiratory protection shall be half face, dual cartridge, air purifying respirators with HEPA-filters. Workers shall remove their protective clothing at the disposal site, place it in labeled disposal bags and leave them with the deposited waste shipment.
- BB. For the compaction operation, the asbestos abatement contractor shall ensure that disposal sites personnel have been provided with personal protective equipment by the disposal operator. If the disposal site City has not provided this protective equipment, the asbestos abatement contractor shall supply protective clothing and respiratory protection for the duration of this operation (PAPR respirators are mandatory).
- CC. If containers are broken or damaged, the asbestos abatement contractor or Waste Hauler shall, using personnel who are properly trained and wearing proper protective equipment, shall repackage the waste in properly labeled containers. Asbestos abatement contractor shall then clean the entire truck and its contents using HEPA-vacuums and wet cleaning techniques until no visible residue is observed.
- DD. Following the removal of all containerized waste, the asbestos abatement contractor shall decontaminate the truck cargo area using HEPA-vacuums and/or wet cleaning techniques until no residue is observed. All 6-mil polyethylene sheeting shall be removed and discarded as asbestos-containing waste material along with contaminated cleaning material and protective clothing, in containers at the disposal site.
- EE. The transporter(s) of all asbestos waste shall not back-haul any items on his return from landfill/disposal site.
- FF. All asbestos waste shall be disposed of in an approved Asbestos Landfill site only.
 - 1. NO PERSON UNDER ANY CIRCUMSTANCES SHALL ABANDON ACW. The same shall be disposed of only by certified persons in approved landfills.



2. A manifest form will be signed by the Landfill documenting receipt and acceptance of the asbestos-containing waste. This manifest will be furnished to the City of New York within thirty calendar days from the project completion date.
3. It is the responsibility of the Asbestos abatement contractor to determine current waste handling, transportation and disposal regulations for the work site and for each waste disposal landfill. The Asbestos abatement contractor must comply fully with these regulations and all appropriate U.S. Department of Transportation, EPA and other Federal, State and Local entities' regulations and all other current legal requirements.
4. The asbestos abatement contractor shall obtain an agreement from the transporter (s) that the practice of "Back-Hauling" will not be engaged in, with respect to any and all waste loads taken from this site during the work.
5. The asbestos abatement contractor will document actual disposal of the waste at the designated landfill by having completed a Disposal Certificate and will provide a copy of the same to the Department of Design and Construction.

PART 6 – ACCEPTANCE

6.01 ACCEPTANCE

Upon satisfactory completion of all decontamination procedures, a certificate will be issued by the Construction Project Manager with copies to all parties.

- A. A letter of Compliance stating that all the work on the project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations.
- B. All warranties as stated in the Specifications.

END OF SECTION 028213



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APPENDIX A
ASBESTOS ABATEMENT DRAWINGS



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RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK FLUSHING MEADOWS/CORONA PARK QUEENS, NEW YORK 11368

ASBESTOS ABATEMENT GENERAL NOTES:

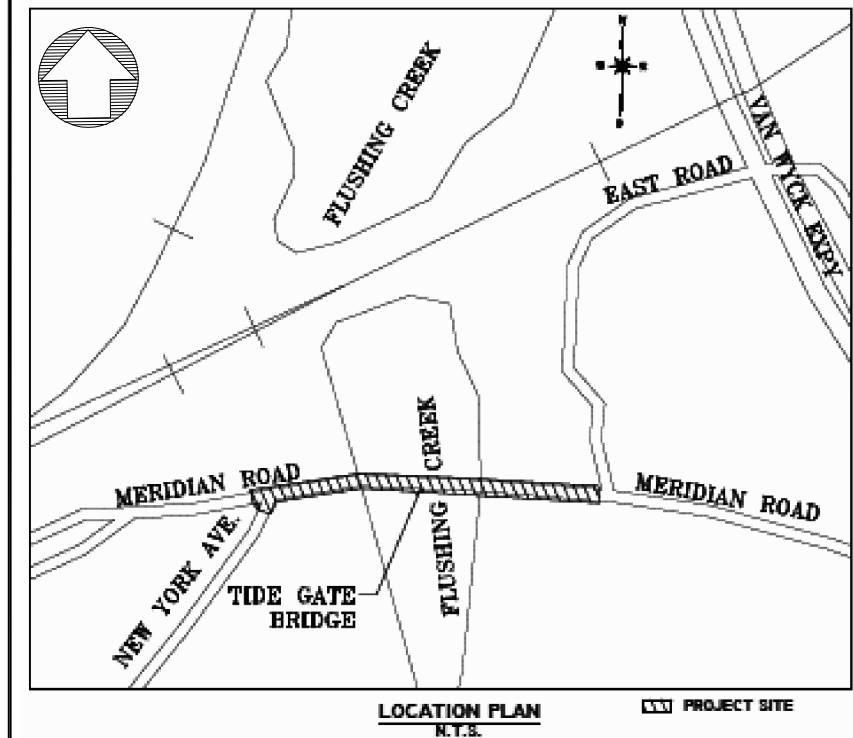
1. ALL ASBESTOS REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAW, GUIDELINES, REGULATIONS, ORDERS AND DIRECTIVES, INCLUDING WITHOUT LIMITATIONS, THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA), AND U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH), NEW YORK CITY LOCAL LAW TITLE 15, CHAPTER 1 RCNY, AND THE NEW YORK STATE DEPARTMENT OF LABOR (NYSDDL).
2. ASBESTOS ABATEMENT CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, SERVICES, ETC., NECESSARY TO PERFORM THE WORK REQUIRED FOR ASBESTOS ABATEMENT IN ACCORDANCE WITH CONTRACT DOCUMENTS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
3. ASBESTOS ABATEMENT CONTRACTOR SHALL DEVELOP AND IMPLEMENT A WRITTEN STANDARD PROCEDURE FOR ABATEMENT WORK TO ENSURE MAXIMUM PROTECTION AND SAFEGUARD FROM ASBESTOS EXPOSURE OF THE WORKERS, VISITORS, EMPLOYEES, GENERAL PUBLIC, AND THE ENVIRONMENT.
4. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE SIGNS, LABELS, WARNINGS, AND POST INSTRUCTIONS THAT ARE NECESSARY TO PROTECT, INFORM AND WARN PEOPLE OF THE HAZARD FROM ASBESTOS EXPOSURE. POST IN A PROMINENT AND CONVENIENT PLACE FOR THE WORKERS A COPY OF THE LATEST APPLICABLE REGULATIONS FROM OSHA, EPA, NIOSH, NYCDEP, AND NYSDDL.
5. CITY TO NOTIFY ASBESTOS ABATEMENT CONTRACTOR OF ITEMS THAT CANNOT BE REMOVED OR REQUIRES SPECIAL ATTENTION. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE PROPER PROTECTION AS WELL AS DECONTAMINATION OF ALL ITEMS REMAINING IN THE WORK AREA.
6. ASBESTOS ABATEMENT CONTRACTOR SHALL HEPA VACUUM AND WET WIPE ALL PORTABLE ITEMS WITHIN THE WORK AREA. CITY IS TO INDICATE ALL ITEMS THAT MAY REQUIRE SPECIAL ATTENTION (I.E., COMPUTERS, ELECTRICAL EQUIPMENT, ETC).
7. ASBESTOS ABATEMENT CONTRACTOR SHALL NOTE THAT PORTIONS OF THE BRIDGE WILL BE OCCUPIED, REFER TO CONTRACT SPECIFICATIONS FOR WORK SCHEDULES AND ACCESS TO THE WORK AREA.
8. THE ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE ALL ELECTRICAL, WATER, AND WASTE CONNECTIONS, TIE-INS, EXTENSIONS, CONSTRUCTION MATERIALS, SUPPLIES, ETC. AS REQUIRED TO FACILITATE ASBESTOS REMOVAL.
9. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRIC AND LIGHT THROUGHOUT THE WORK AREA(S) AS REQUIRED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND CODES.
10. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE PORTABLE SMOKE/HEAT DETECTORS THROUGHOUT EACH WORK AREA.
11. ASBESTOS ABATEMENT CONTRACTOR SHALL PROPERLY PROTECT ALL CONTROLS, TUBING, ELECTRICAL PANELS, EQUIPMENT, ETC. WITHIN THE WORK AREA.
12. ASBESTOS ABATEMENT CONTRACTOR SHALL ISOLATE AND PROTECT ALL MECHANICAL EQUIPMENT REMAINING IN THE WORK AREA. ALL EQUIPMENT TO REMAIN SHALL BE HEPA VACUUMED AND WET WIPED PRIOR TO PLASTICIZING AND UPON THE COMPLETION OF THE PROJECT. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE WOOD BOX ENCLOSURES AND ADEQUATE VENTILATION FOR ANY EQUIPMENT THAT WILL REMAIN IN OPERATION DURING ASBESTOS ABATEMENT. ASBESTOS ABATEMENT CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS WITH CONSULTANT AND CITY.
13. ASBESTOS ABATEMENT CONTRACTOR SHALL EXERCISE EXTREME CARE AND CAUTION DURING ANY AND ALL DEMOLITION AND ABATEMENT OPERATIONS. ASBESTOS ABATEMENT CONTRACTOR SHALL CONDUCT REMOVAL OF ALL MATERIALS FROM THE SITE WITH MINIMUM DISTURBANCE; PROVIDE PROPER PROTECTION AND REGULAR MAINTENANCE OF ALL BRIDGE PREMISES DIRECTLY OR INDIRECTLY ASSOCIATED WITH ABATEMENT OPERATIONS.
14. ASBESTOS ABATEMENT CONTRACTOR SHALL COMPLETELY ISOLATE WORK AREA AS DESCRIBED IN CONTRACT DOCUMENTS. ALL ISOLATION BARRIERS, PERSONAL/WASTE DECONTAMINATION ENCLOSURE SYSTEM (P./W.D.E.S.), PLASTIC SHEETING, AIR FILTRATION DEVICES (AFD), AUXILIARY MAKE-UP AIR MANIFOLDS, ETC. SHALL BE IN PLACE AND APPROVED BY THE CITY PRIOR TO THE BEGINNING OF ASBESTOS REMOVAL.

15. ASBESTOS ABATEMENT CONTRACTOR SHALL LOCATE AND SEAL ALL PENETRATIONS THROUGH WALLS BETWEEN THE WORK AREA AND ADJACENT AREAS, INCLUDING, BUT NOT LIMITED TO PIPE, DUCT, CONDUIT, CHASES, AND OPENINGS IN FIRE WALLS OR DECKS BETWEEN FLOORS AS REQUIRED BY THE FIELD CONDITION.
16. ASBESTOS ABATEMENT CONTRACTOR SHALL CONSTRUCT ISOLATION BARRIERS IN ORDER TO PROVIDE COMPLETE AND TOTAL ISOLATION OF THE ABATEMENT SITE FROM ALL ADJACENT AREAS. ALL ISOLATION BARRIERS SHALL BE OF WOOD; 2" X 4" AT 16" O.C. WITH 1/2" PLYWOOD SHEATHING, SEALED ON BOTH SIDES WITH TWO LAYERS OF 6 MIL PLASTIC SHEETING. CAULK AND SEAL ALL JOINTS AT THE PERIMETER. ALL MATERIALS SHALL BE FIRE RETARDANT. ASBESTOS ABATEMENT CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS. CONSTRUCTION OF BARRIERS SHALL BE CONDUCTED UNDER STRICT ASBESTOS ABATEMENT CONTROLS.
17. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE EMERGENCY EXITS (EMCB) AS REQUIRED.
18. ASBESTOS ABATEMENT CONTRACTOR SHALL COORDINATE WITH CONSTRUCTION PROJECT MANAGER AND BRIDGE ENGINEER HVAC SHUTDOWN AS REQUIRED.
19. ASBESTOS ABATEMENT CONTRACTOR SHALL SEPARATE AND BLANK-OFF WITH SHEET METAL AND CAP ALL RETURN AND LOW PRESSURE DUCT SYSTEMS WHICH ENTER AND EXIT THE WORK AREA AS REQUIRED, SEAL ALL CONNECTING JOINTS AIR TIGHT WITH TAPE AND PLASTIC SHEETING. COORDINATE ALL WORK WITH THE FACILITY MANAGER AND THE CONSTRUCTION PROJECT MANAGER.
20. ASBESTOS ABATEMENT CONTRACTOR SHALL CONSTRUCT A PERSONAL/WASTE DECONTAMINATION ENCLOSURE SYSTEM (P./W.D.E.S.) AS INDICATED. IT SHALL BE OF SUFFICIENT SIZE TO ACCOMMODATE STORAGE OF MATERIALS, EQUIPMENT, ETC. WHILE ALLOWING FOR THE PASSAGE OF LABORERS AND THEIR EQUIPMENT (SCAFFOLDING) BETWEEN CLEAN AND CONTAMINATED AREAS.
21. SHOWER AND WASTEWATER MUST BE FILTERED AND DISPOSED OF IN THE BRIDGE'S SANITARY SYSTEM. REFER TO CONTRACT SPECIFICATIONS.
22. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE PORTABLE CABINET-MOUNTED AIR FILTRATION DEVICES (AFD) EQUIPPED WITH HEPA FILTERS AT 99.97% EFFICIENCY, TO .3 MICRONS. THE NUMBER OF UNITS SHALL BE SUFFICIENT TO ENSURE A MINIMUM OF FOUR (4) COMPLETE AIR CHANGES PER HOUR AND MAINTAIN A NEGATIVE PRESSURE DIFFERENTIAL OF .02 INCHES OF WATER.
23. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE SECURITY SUCH THAT ALL BRIDGE EMPLOYEES AND/OR VISITORS ARE PROHIBITED FROM ENTERING THE WORK AREA. ASBESTOS ABATEMENT CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FIRE WATCH DURING ALL ABATEMENT OPERATIONS.
24. ASBESTOS ABATEMENT CONTRACTOR SHALL INSTALL AFD EXHAUST MANIFOLD AS REQUIRED FOR ADEQUATE AIRFLOW. REFER TO CONTRACT SPECIFICATIONS FOR DESCRIPTION. COORDINATE ALL LOCATIONS WITH CONSTRUCTION PROJECT MANAGER.
25. ASBESTOS ABATEMENT CONTRACTOR SHALL SUPPLY ALL NECESSARY CONNECTIONS, FASTENERS, FLEXIBLE DUCTS, MANIFOLDS, SUPPORTS, ETC. ANY AND ALL INSTALLATIONS SHALL COMPLY WITH CONTRACT DOCUMENTS AND MANUFACTURER'S REQUIREMENTS.
26. ASBESTOS ABATEMENT CONTRACTOR SHALL APPLY ONE (1) COAT OF SEALANT PRIOR TO POST TESTING CLEARANCE OVER ALL SURFACES FROM WHICH ASBESTOS-CONTAINING MATERIALS HAVE BEEN REMOVED. REFER TO CONTRACT SPECIFICATIONS.
27. ASBESTOS ABATEMENT CONTRACTOR SHALL HEPA VACUUM AND WET WIPE ALL SURFACES WITHIN THE WORK AREA UPON THE COMPLETION OF ASBESTOS ABATEMENT. REFER TO CONTRACT SPECIFICATIONS.
28. ASBESTOS ABATEMENT CONTRACTOR MAY ENCOUNTER EXTENSIVE CONDUIT, WIRING, DUCTS, ETC. ABOVE CEILING. ALL ITEMS SHALL BE PROPERLY PROTECTED PRIOR TO ABATEMENT AND THOROUGHLY DECONTAMINATED UPON COMPLETION OF ASBESTOS REMOVAL. REFER TO CONTRACT SPECIFICATIONS.
29. DEBRIS RESULTING FROM ANY DEMOLITION AND/OR ASBESTOS ABATEMENT ACTIVITIES SHALL BE DISPOSED OF AS INDICATED IN CONTRACT DOCUMENTS OR DIRECTED BY THE CONSTRUCTION PROJECT MANAGER.

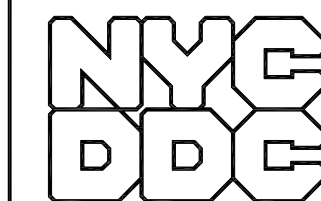
30. ALL ROUTES THROUGH THE BRIDGE, TO BE USED DURING THE ASBESTOS ABATEMENT OPERATIONS SHALL BE COORDINATED WITH FACILITY MANAGER AND CONSTRUCTION PROJECT MANAGER. ASBESTOS ABATEMENT CONTRACTOR SHALL UTILIZE ENCLOSED MOBILE CONTAINERS FOR TRANSPORTATION OF ALL WASTE MATERIALS. ALL EGRESS ROUTES SHALL BE PROPERLY PROTECTED AND SUFFICIENTLY MAINTAINED BY THE ASBESTOS ABATEMENT CONTRACTOR .
31. UNLESS OTHERWISE NOTED, ALL WORKER AND WASTE DECONTAMINATION FACILITIES, BOTH CONTIGUOUS AND REMOTE FROM THE WORK AREA, SHALL BE CONSTRUCTED WITH A SOLID OUTER SHELL. THE OUTER SHELL SHALL BE FRAMED WITH 2" x 4" STUDDING 16" O.C. WITH A SOLID SHEATHING MATERIAL OF AT LEAST 3/8" MINIMUM THICKNESS.
32. LOCATION OF ANY REMOTE DECONTAMINATION FACILITIES SHALL BE COORDINATED AND APPROVED BY THE CITY AND THE CONSTRUCTION PROJECT MANAGER PRIOR TO THE START OF WORK.
33. AIR FILTRATION DEVICE (AFD) EXHAUST LOCATIONS WILL BE COORDINATED WITH THE FACILITY MANAGER AND THE CONSTRUCTION PROJECT MANAGER.
34. CONTRACT DRAWINGS WERE PREPARED FROM EXISTING DRAWINGS SUPPLIED BY THE CITY AND PROVIDED FOR INFORMATION PURPOSES ONLY. THE CONSULTANT MAKES NO CLAIMS AS TO THEIR ACCURACY OR ANY INFORMATION DERIVED THROUGH THEIR USE.
35. ASBESTOS ABATEMENT CONTRACTOR IS RESPONSIBLE TO COORDINATE AND CONFIRM THE EXACT SCOPE OF WORK FOR EACH PHASE OF ABATEMENT WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
36. ASBESTOS ABATEMENT CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE AND DETERMINING ALL QUANTITIES, MEASUREMENTS, AND ANY OTHER CONDITIONS RELATIVE TO THE ENTIRE PROJECT. THE DRAWINGS ARE ONLY A DIAGRAMMATICAL REPRESENTATION OF THE WORK AREAS AND MAY NOT CONSTITUTE THE ACTUAL QUANTITIES OF THE MATERIAL. ASBESTOS ABATEMENT CONTRACTOR IS RESPONSIBLE FOR CONFIRMATION OF THE ACTUAL TOTAL QUANTITIES OF THE WORK PRIOR TO BIDDING. NO EXTRA COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCES BETWEEN ACTUAL CONDITIONS AND THOSE INDICATED ON THE DRAWINGS. IT IS THE CITY'S INTENT TO REMOVE ALL ASBESTOS-CONTAINING MATERIAL SCHEDULED TO BE DISTURBED WITHIN THE WORK AREAS. THE ASBESTOS ABATEMENT CONTRACTOR SHALL PROMPTLY NOTIFY THE CITY SHOULD ADDITIONAL SUSPECT ACM BE ENCOUNTERED DURING ABATEMENT ACTIVITIES.
37. ASBESTOS ABATEMENT CONTRACTOR SHALL PROVIDE ALL SCAFFOLDING, PLATFORM INSTALLATION, EQUIPMENT, TOOLS, TRANSPORTATION AND ANY OTHER EQUIPMENT REQUIRED AND/OR NECESSARY TO COMPLETE ALL WORK DESCRIBED IN THE CONTRACT DOCUMENTS.
38. CONTRACTOR SHALL PROTECT NON-ACM INSULATION AND/OR ALL FIXED OBJECTS WITHIN THE WORK AREAS WITH TWO LAYERS OF 6 MIL POLYETHYLENE SHEETING DURING REMOVAL ACTIVITIES. COSTS ASSOCIATED WITH THESE ACTIVITIES SHALL BE INCLUDED IN THE CONTRACTORS BID.

DRAWING	DRAWING NAME
H001.00	ASBESTOS ABATEMENT GENERAL NOTES
H002.00	ASBESTOS ABATEMENT - EXISTING BRIDGE PLAN

KEY PLAN



LiRo Engineers, Inc.
Three Aerial Way
Syosset, New York 11791



**Department of
Design and
Construction**

REVISIONS:

NUMBER	DESCRIPTION	DATE
1		
2		
3		
4		
5		

CAPITAL PROJECT NUMBER: HBPED800Q

**RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK
FLUSHING MEADOWS/CORONA PARK
QUEENS, NEW YORK 11368**

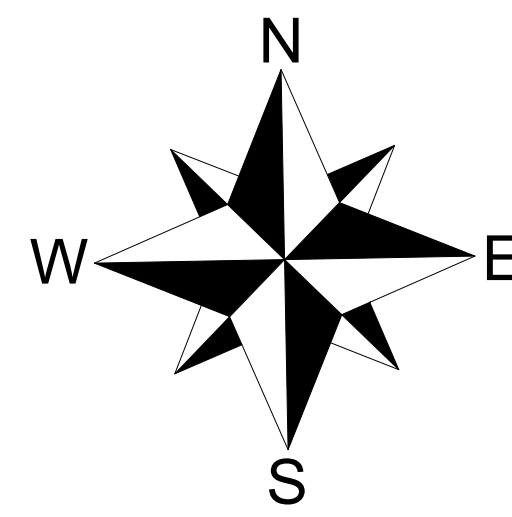
DRAWING TITLE:

**ASBESTOS ABATEMENT
GENERAL NOTES**

DRAWN BY: A. KELLY	SCALE: SEE BAR SCALE
PROJ. DESIGNER: V. ORTIZ	DATE: 07/22/2019
CERTIFICATE NO.: 06-01697	DRAWING NUMBER:
CHECKED BY: B. CZELUSTA	

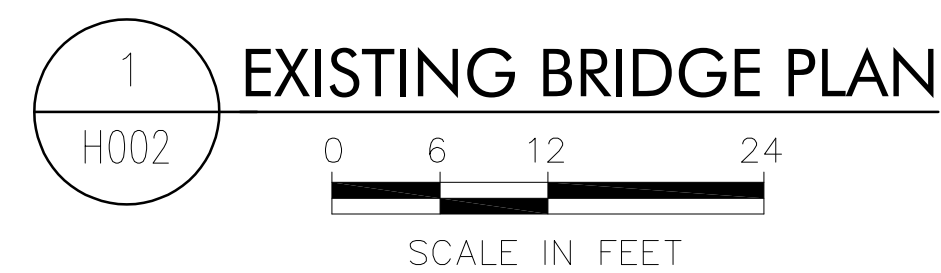
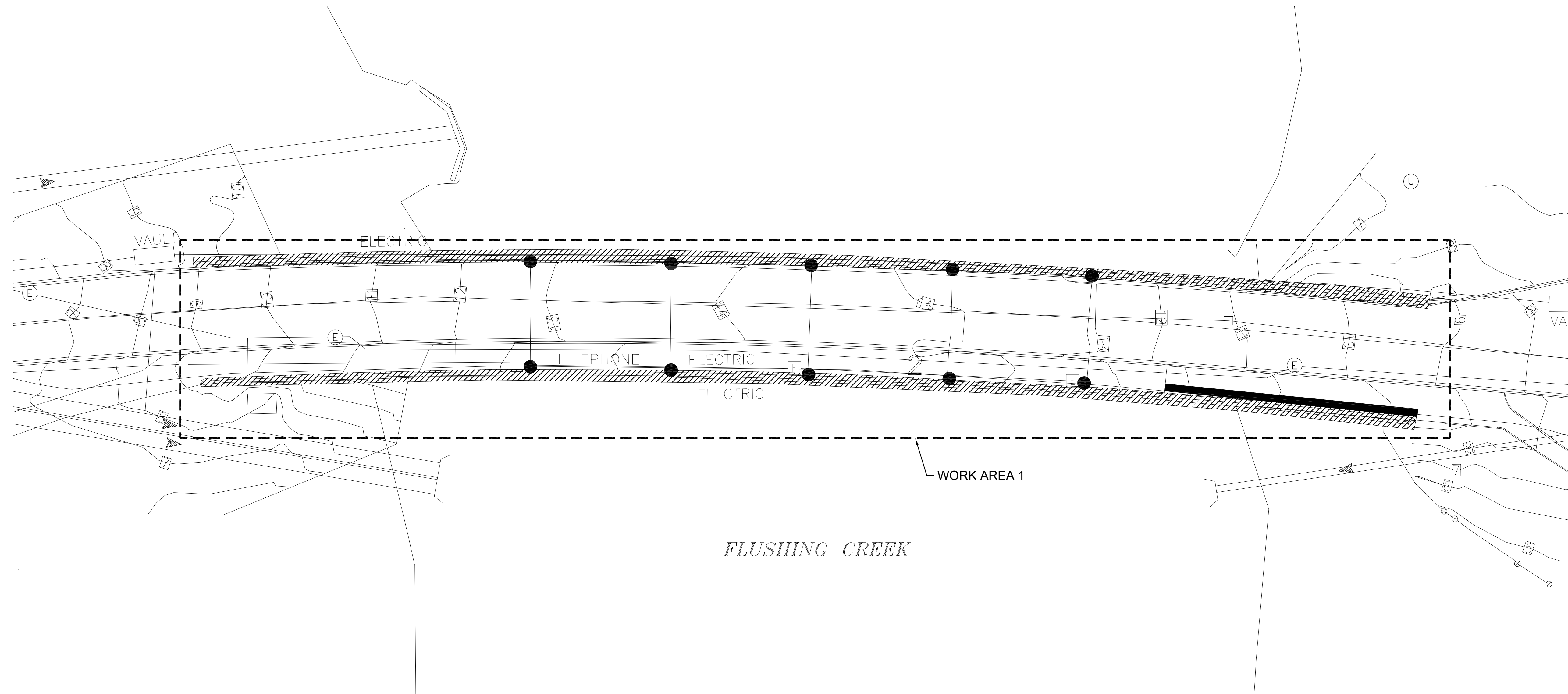
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1 OF 2



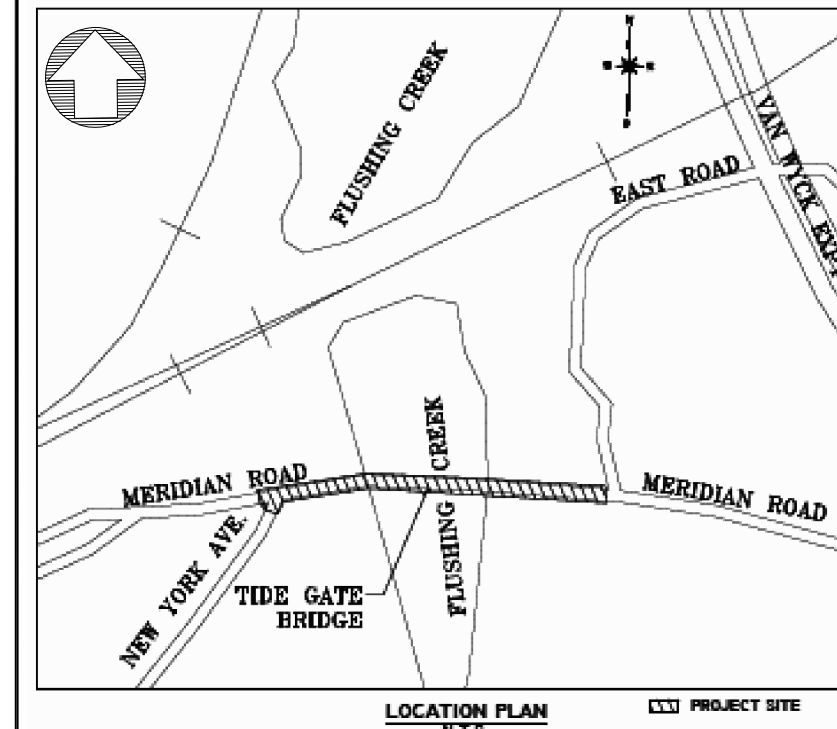
LEGEND

- LOCATION OF TEXTURED PAINT ON PARAPET WALL (BEIGE)
- LOCATION OF PARAPET EXPANSION JOINT CAULKING (BEIGE)
- LOCATION OF PARAPET BASE TAR (BEIGE)
- WORK AREA LIMITS



Work Area	Removal Procedure	Approximate Square Feet (Sq. Ft.)	Approximate Linear Feet (Ln. Ft.)
1	NYCDEP Title 15, Chapter 1 §1-109 Vertical Exterior Surface Procedure Removal.	3,500 Sq. Ft. of Textured Paint on Parapet Wall (Beige)	-
		100 Ln. Ft. Parapet Expansion Joint Caulking (Beige)	-
		50 Sq. Ft. Parapet Base Tar (Black)	-

KEY PLAN



LiRo Engineers, Inc.
Three Aerial Way
Syosset, New York 11791

Department of Design and Construction

REVISIONS:

NUMBER	DESCRIPTION	DATE
1		
2		
3		
4		
5		

CAPITAL PROJECT NUMBER: HBPED800Q

**RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK
FLUSHING MEADOWS/CORONA PARK
QUEENS, NEW YORK 11368**

DRAWING TITLE:
**ASBESTOS ABATEMENT
EXISTING BRIDGE PLAN**

DRAWN BY: A. KELLY	SCALE: SEE BAR SCALE
PROJ. DESIGNER: V. ORTIZ	DATE: 07/22/2019
CERTIFICATE NO.: 06-01697	DRAWING NUMBER:
CHECKED BY: B. CZELUSTA	H002.00

DRAWING NUMBER:
2 OF 2

HAZ - PAGES**SUPPLEMENTAL DOCUMENTATION FOR USE
WITH SPECIFICATIONS FOR HANDLING,
TRANSPORTATION AND DISPOSAL
OF NONHAZARDOUS AND POTENTIALLY
HAZARDOUS CONTAMINATED MATERIALS**

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

(NO TEXT ON THIS PAGE)

**SUPPLEMENTAL DOCUMENTATION FOR USE WITH SPECIFICATIONS FOR
HANDLING, TRANSPORTATION, AND DISPOSAL
OF POTENTIAL AND IDENTIFIED
CONTAMINATED AND HAZARDOUS MATERIALS**

**RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK AND
RECONSTRUCTION OF TIDE GATES AND SLUICE GATES**

**BOROUGH OF QUEENS
CITY OF NEW YORK**

Project ID: HBPED800Q

Prepared By:



30-30 Thomson Avenue
Long Island City, New York 11101

June 8, 2022

These Haz-Pages are to be read in conjunction with the corresponding 8.01 sections of
STANDRD HIGHWAY SPECIFICATIONS, May 16, 2022.

- Final -

**Phase I Corridor Assessment and
Phase II Subsurface Corridor Investigation Report**

For

**PORPOISE PEDESTRIAN BRIDGE
FLUSHING MEADOWS/CORONA PARK
QUEENS, NEW YORK**

NYCDDC PROJECT NO. HBPED800Q

WORK ORDER NO. 10233-LIRO-3-9609

CONTRACT REGISTRATION NO. 20151405569

Prepared for:



Bureau of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:



LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 15-008-0265

May 19, 2015



TABLE OF CONTENTS

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 BACKGROUND INFORMATION.....1

1.2 SCOPE OF WORK1

2.0 CORRIDOR INFORMATION3

2.1 CORRIDOR LOCATION, DESCRIPTION, AND USE3

2.2 DESCRIPTION OF SURROUNDING PROPERTIES3

2.3 CORRIDOR AND REGIONAL TOPOGRAPHIC SETTING3

2.4 CORRIDOR AND REGIONAL GEOLOGY3

2.5 CORRIDOR AND REGIONAL HYDROGEOLOGY4

3.0 PHASE I CA EVALUATION5

3.1 SITE RECONNAISSANCE5

3.2 HISTORICAL SANBORN MAP REVIEW5

3.3 REGULATORY AGENCY DATABASE REPORT REVIEW6

3.4 FINDINGS AND RECOMMENDATIONS OF THE PHASE I CA6

4.0 PHASE II SCI CORRIDOR EVALUATION7

4.1 SOIL QUALITY INVESTIGATION7

4.2 GROUNDWATER QUALITY INVESTIGATION8

4.3 LABORATORY ANALYSES8

4.4 DATA EVALUATION8

5.0 PHASE II SCI FINDINGS10

5.1 FIELD SCREENING10

5.2 SOIL AND GROUNDWATER LABORATORY ANALYTICAL RESULTS10

5.2.1 Volatile Organic Compounds (VOCs) in Soil10

5.2.2 Semi-Volatile Organic Compounds (SVOCs) in Soil.....10

5.2.3 Target Analyte List Metals (TAL Metals) in Soil.....10

5.2.4 Pesticides in Soil.....11

5.2.5 Herbicides in Soil.....11

5.2.6 PCBs in Soil.....11

5.2.7 Waste Classification of Soil.....11

5.2.8 Analysis of NYCDEP Parameters in Groundwater11

6.0 PHASE II SCI CONCLUSIONS AND RECOMMENDATIONS12

7.0 STATEMENT OF LIMITATIONS14

TABLE OF CONTENTS (continued)

<u>Tables</u>	1	NYCDDC Specific Risk Criteria
	2	Summary Assessment Results (High and Moderate Risk Sites)
	3	Summary of Environmental Boring Data
	4	Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil
	5	Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Soil
	6	Summary of Target Analyte List (TAL) Metals Detected in Soil
	7	Summary of Pesticides Detected in Soil
	8	Summary of Herbicides Detected in Soil
	9	Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil
	10	Summary of Waste Characterization in Soil
	11	Groundwater Quality
<u>Figures</u>	1	Topographic Corridor Location Map
	2	Corridor Area Map
	3	Risk Sites on Corridor Area Map
	4	Sample Location Plan
<u>Appendices</u>	A	Site Reconnaissance Photographs
	B	Sanborn Fire Insurance Maps
	C	Regulatory Agency Database Report – Included on Attached CD
	D	Geologic Boring Logs/Temporary Well Construction Detail
	E	Laboratory Analytical Results – Included on Attached CD
	F	Qualifications of Environmental Professionals
	G	Statement of Limitations

EXECUTIVE SUMMARY

On behalf of the New York City Department of Design and Construction (NYCDDC), LiRo Engineers, Inc. (LiRo) conducted a combined Phase I Corridor Assessment (CA) and Phase II Subsurface Corridor Investigation (SCI) of the Porpoise Pedestrian Bridge Corridor (also known as Tide Gate Bridge; hereinafter referred to as the Corridor) to reasonably determine the existence of any potential source of subsurface contamination that may adversely impact proposed construction activities. The Corridor is located within the Flushing Meadows/Corona Park in Queens, New York. The proposed construction activities for the Corridor include renovation and restoration of the existing concrete rigid frame bridge. The Corridor is approximately 470 linear feet in length and consists Porpoise Pedestrian Bridge at Perimeter Road between New York Avenue and Avenue of Enterprise.

The Phase I CA portion of this report was conducted to reasonably determine the potential for environmental concerns and possible contamination posed by properties along the Corridor or within the immediately surrounding area. The CA process involved conducting a site reconnaissance on March 18 and 20, 2015 to document current property use and conditions, a review of historical Sanborn Fire Insurance Maps to document past property use, and a review of a regulatory agency database report to identify Corridor properties and immediately surrounding sites of potential environmental concern.

Based on the Risk Criteria protocol established by the NYCDDC, LiRo identified three (3) sites categorized as initially having a “High” risk with respect to potential impact on the project. The sites were re-classified because they are outside of the Corridor limits or new modifying information indicated a lower risk. Modifying information included sites with spills that had been closed by the New York State Department of Environmental Conservation (NYSDEC), sites identified on one (1) or more databases with no evidence or records of spills or other concerns, and older sites that were redeveloped or located such that they no longer posed significant risks.

Based on modifying information, LiRo recommends that all three (3) “High” risk sites be reclassified as “Moderate” risk sites. Therefore, the final evaluation has identified three (3) final “Moderate” risk sites with respect to potential impact on the project corridor. The final “Moderate” risk sites are listed below:

MODERATE RISK SITES

- 1) Flushing Meadows Golf Center, Perimeter Rd. (Moderate Risk Site No. 1)
- 2) Long Island Railroad and Mets-Willets Point Station, North and Northwest of the Corridor (Moderate Risk Site No. 2)
- 3) Former Auto Repair Garage and Manufacturing Facility (currently being redeveloped), 4106-4110 Delong Rd. (Moderate Risk Site No. 3)

Based on the findings of the Phase I CA, the three (3) “Moderate” risk sites could impact the subsurface (soil and/or groundwater) of the Corridor.

As requested by the NYCDDC, LiRo also conducted a Phase II SCI. In conjunction with the Phase I CA, the objective of the Phase II SCI was to assess the presence of any subsurface contamination that may potentially impact proposed construction activities. The proposed construction activities for the Corridor include renovation and restoration of the existing concrete rigid frame bridge. The Phase II SCI activities consisted of the following components:

- The advancement of four (4) borings (SB-01 through SB-04) to a terminal depth of 20 feet below ground surface (ft bgs). Field screening consisted of classification and identification of soils from surface grade to the bottom of each boring. Soil samples were classified in the field using the Unified Soil Classification System (USCS), including photo-ionization detector (PID) readings, and identification of visual and olfactory indicators of contamination (staining, odors). Each boring was cleared to a depth of 6 ft bgs using a vacuum excavator/air knife combination prior to boring advancement;
- The collection of one (1) grab soil sample from each of the four (4) soil borings identified as “Moderate” risk boring locations (SB-01 through SB-04). The grab soil samples were analyzed for United States Environmental Protection Agency (USEPA) Target Compound List (TCL) volatile organic compounds (VOCs);
- The collection of one (1) composite soil sample from each of the four (4) soil borings identified as “Moderate” risk boring locations (SB-01 through SB-04). The composite soil samples were analyzed for the following parameters: (1) TCL Base Neutral/Acid (BN/A) extractable semi-volatile organic compounds (SVOCs); (2) Target Analyte List (TAL) metals; (3) TCL pesticides; (4) TCL Herbicides; and, (5) TCL polychlorinated biphenyls (PCBs);
- The collection of one (1) waste characterization composite soil sample which was analyzed for: (1) the USEPA Full Toxicity Characteristics Leaching Procedure (TCLP) parameters, including PCBs; (2) the Resource Conservation and Recovery Act (RCRA) Characteristics (ignitability, reactivity, and corrosivity); and, (3) Total Petroleum Hydrocarbons Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO);
- The installation of two (2) temporary well points (TWPs) (TWP-02 and TWP-04) in two (2) existing soil borings, the collection of one (1) groundwater sample from each TWP, and the laboratory analyses of these samples for the parameters published by the New York City Department of Environmental Protection (NYCDEP) as Limitations for Effluent to Sanitary or Combined Sewers (NYCDEP Sewer Discharge Criteria); and,
- The preparation of this report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution.

In order to evaluate the subsurface soil quality, laboratory analytical results for the soil samples were compared with the regulatory standards identified in: (1) New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Levels (CP-51 SCLs); (2) CP-51 Supplemental Soil Cleanup Objectives (SSCOs); (3) NYSDEC Subpart 375-6: Remedial Program Unrestricted and Restricted Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); and, (4) the Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and NYSDEC Part 371.

The subsurface soils encountered during this Phase II SCI consisted predominantly of fill material, which included rocks, ash, and tree roots, from 6 inches below grade to approximately 15 ft bgs. The fill material was overlying peat which was overlying brown, grey, and black colored fine to medium grained sand with some clay. Groundwater was encountered within the on-site borings at depths ranging from 4 to 6 ft bgs.

Field screening did not identify any visual or olfactory evidence of impacts or elevated PID readings within the soil borings advanced.

One (1) VOC (methylene chloride) was reported in two (2) of the four (4) grab samples collected at concentrations above the Unrestricted Use (Track 1) SCO. Methylene chloride is a common laboratory solvent and its detection is likely due to laboratory contamination. SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene) were reported at concentrations exceeding the Unrestricted Use (Track 1) and Restricted Use (Track 2) SCOs and the CP-51 SCLs/SSCOs in one (1) of four (4) soil samples collected. The reported SVOCs are polycyclic aromatic hydrocarbons (PAHs) and may be indicative of the presence of historic fill material placed at the Site and are characteristic of residuals from releases of petroleum products. Metals (arsenic, barium, cadmium, copper, iron, lead, mercury, and/or zinc) were reported above the Unrestricted Use (Track 1) SCOs, Restricted Use (Track 2) SCOs, and/or CP-51 SSCOs in the four (4) composite samples collected. Pesticides (4,4'-DDD, 4,4'-DDE, and 4,4'-DDT) were reported in two (2) of the four (4) composite soil samples at concentrations that exceed the Unrestricted Use (Track 1) SCOs. No herbicides or PCBs were reported in the four (4) composite samples collected.

The one (1) waste characterization soil sample did not exhibit evidence of hazardous waste characteristics. DRO were reported within the one (1) waste classification soil sample collected.

Both groundwater samples (TWP-02 and TWP-04) were analyzed for the parameters required by the NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (Daily Limit). Lead and zinc exceeded NYCDEP Sewer Discharge Limitations in groundwater sample TWP-04. In addition, Total Suspended Solids (TSS) were reported exceeding the NYCDEP Sewer Discharge Limitation in both groundwater samples (TWP-02 and TWP-04). The TSS exceedances were reported at 4,200 milligrams per liter (mg/L) in TWP-02 and 22,000 mg/L in TWP-04. These concentrations exceed the NYCDEP Sewer Discharge Limitation of 350 mg/L.

Based on the findings of the Phase II SCI, the following conclusions are presented:

- Field screening did not identify any visual or olfactory evidence of impacts or elevated PID readings within the soil borings advanced.
- Laboratory analytical results identified VOC, SVOC, and DRO impacted soils along the Corridor. Concentrations of metals and pesticides above regulatory levels were also reported in the subsurface soils. The presence of VOCs, SVOCs, DRO, metals, and pesticides in the subsurface soils may be attributed to: (a) residuals from potential releases of petroleum products from the risk sites identified on and within the vicinity of the Corridor; (b) contaminants in historic fill material placed on the Corridor; and/or, (c) natural background levels (metals);
- The waste characterization soil sample did not exhibit hazardous waste characteristics; and,
- The groundwater samples collected along the Corridor do not meet the NYCDEP Sewer Discharge Criteria for sanitary or combined sewers. Concentrations of lead, zinc, and/or TSS were reported exceeding the NYCDEP Sewer Discharge Limitation in the groundwater samples collected from the two (2) TWPs (TWP-02 and TWP-04). The presence of TSS in the groundwater is attributed to the fact that unfiltered groundwater samples were collected from TWPs and not permanent monitoring wells. However, the groundwater samples collected from TWPs are considered to be representative

of conditions to be encountered during construction activities. The presence of lead and zinc may be attributed to background levels.

Based on the results of the field investigation and laboratory analytical results, LiRo recommends the following:

- The Contract documents should identify provisions for managing, handling, transporting, and disposing of non-hazardous contaminated soil (i.e., SVOCs, metals, pesticides, and DRO) and a contingency plan for managing non-hazardous petroleum-impacted soils in case they are encountered during the subsurface activities. The Contractor should be required to submit a Material Handling Plan (MHP) to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Due to the presence of SVOCs, metals, pesticides, and DRO exceeding the applicable regulatory standards within the proposed Corridor, dust control mitigation procedures are recommended during excavation activities to minimize the production and dispersion of fugitive airborne dust. To minimize the release of potential airborne contaminants as a direct result of construction activities, the Contractor should develop and implement a Community Air Monitoring Plan (CAMP). The CAMP should be developed in accordance with NYSDEC Division of Environmental Remediation (DER)-10 Requirements. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain construction activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the surrounding community located downwind from potential airborne contaminant releases as a direct result of future construction work activities. Specific requirements should be reviewed for each situation in consultation with New York State Department of Health (NYSDOH) to ensure proper applicability;
- Based on the Phase II SCI field activities, groundwater was encountered between 4 and 5 ft bgs. Dewatering may be necessary during construction activities within the Corridor. Since lead, zinc, and TSS were reported in the groundwater samples at concentrations exceeding the NYCDEP Sewer Discharge Limitations, groundwater may require pre-treatment for these parameters prior to discharge. Therefore, should dewatering be necessary during construction activities within the Corridor to a sanitary or combined sewer, the contractor should be required to obtain a NYCDEP sewer discharge permit;
- In addition, if discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and,
- Before beginning any excavation activity, the contractor should submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety, and Health Administration (OSHA), the NYSDOH, and any other applicable regulations. The HASP should identify the possible locations along the Corridor and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate environmental concerns (i.e., dust control procedures for SVOCs, metals, pesticides, and DRO).

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City Department of Design and Construction (NYCDDC), LiRo Engineers, Inc. (LiRo) conducted a combined Phase I Corridor Assessment (CA) and Phase II Subsurface Corridor Investigation (SCI) of the Porpoise Pedestrian Bridge Corridor (also known as Tide Gate Bridge; hereinafter referred to as the Corridor) to reasonably determine the existence of any potential source of subsurface contamination that may adversely impact proposed construction activities. The Corridor is located within the Flushing Meadows/Corona Park in Queens, New York (see Figure 1). The proposed construction activities for the Corridor include renovation and restoration of the existing concrete rigid frame bridge. The Corridor is approximately 470 linear feet in length and consists of Porpoise Pedestrian Bridge at Perimeter Road between New York Avenue and Avenue of Enterprise.

1.2 Scope of Work

At the request of the NYCDDC, the scope of the Phase I CA was limited to:

1. Conducting a site reconnaissance of the Corridor and adjacent properties;
2. Providing photographic documentation of properties within, and adjacent to the Corridor that are categorized as initial “High” or “Moderate” risk sites, or otherwise considered a potential environmental concern;
3. Conducting a review of Sanborn Fire Insurance Maps to document historical property use; and,
4. Conducting a review of government regulatory agency databases for properties along the Corridors and adjoining sites that are listed.

Once the Phase I CA evaluation was completed, the scope of Phase II SCI was determined based on the Phase I CA findings. The Phase II SCI consisted of a field investigation, laboratory analyses, and the preparation of this combined report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution. Prior to field work being initiated, LiRo submitted an application and insurance certification to obtain a City of New York Parks and Recreation Permit to Perform Work on park property. The Permit to Perform Work was issued to LiRo April 14, 2015.

Drilling activities for the field investigation were performed by Aquifer Drilling and Testing, Inc. of New Hyde Park, New York. Oversight of drilling activities was performed by LiRo. Laboratory analyses were provided by Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts, a NYS Department of Health (NYSDOH) certified laboratory (No. 10899). Field derived Quality Assurance/Quality Control samples (i.e., field blanks, trip blanks, duplicates) were not collected for this project. The field investigation was conducted on April 17, 2015 and consisted of the following components:

- The advancement of four (4) borings (SB-01 through SB-04) to a terminal depth of 20 feet below ground surface (ft bgs). The borings were advanced using a GeoProbe® direct push drill rig. Prior to direct push advancement, borings were cleared to a depth of 6 ft bgs using a vacuum excavator/air knife combination. Soil samples were collected using 5 foot long, 2 inch diameter Macro Core® stainless steel samplers equipped with polyvinyl chloride (PVC) liners. In addition, a site-specific Health and Safety Plan (HASP) was prepared prior to commencing field work.
- Field screening, classification, and identification of soils from the ground surface to the bottom of each boring. Soil samples were visually classified in the field using the Unified Soil Classification System (USCS). Field screening consisted of identifying visual and olfactory indicators of impacts as well as screening with a photoionization detector (PID).
- The collection of one (1) composite and one (1) grab soil sample from each of the four (4) soil borings (SB-01 through SB-04). The composite soil samples were comprised of soil from the entire boring column. The grab soil samples were collected from the 6-inch interval above the water table.
- Laboratory analysis of the composite soil samples for: (1) Target Compound List (TCL) Base Neutral/Acid (BN/A) extractable semi-volatile organic compounds (SVOCs) by United States Environmental Protection Agency (USEPA) Method 8270; (2) Target Analyte List (TAL) metals by USEPA Method 6010B/7010; (3) TCL pesticides by USEPA Method 8081A; (4) TCL herbicides by Method 8151A; and, (5) TCL polychlorinated biphenyls (PCBs) by USEPA Method 8082.
- Laboratory analysis of the grab soil samples for TCL volatile organic compounds (VOCs) by USEPA Method 8260.
- The installation of two (2) temporary well points (TWPs) (TWP-02 and TWP-04) in borings SB-02 and SB-04 and the collection of one (1) groundwater sample from each TWP using direct push technology by installing a slotted PVC screen perpendicular to the groundwater table and riser pipe to grade. Dedicated PVC tubing was deployed in each TWP and connected to a check valve to extract the groundwater samples.
- Laboratory analysis of the groundwater samples for the parameters published by the New York City Department of Environmental Protection (NYCDEP) as Limitations for Effluent to Sanitary or Combined Sewers (NYCDEP Sewer Discharge Criteria).
- The collection of one (1) composite waste characterization (WC) soil sample from all four (4) soil borings (SB-01 through SB-04).
- Laboratory analysis of the waste characterization soil sample for: (a) Full Toxicity Characteristics Leaching Procedure (TCLP) using USEPA SW846 Methods, including PCBs; (b) Resource Conservation and Recovery Act (RCRA) Characteristics (ignitability, reactivity, and corrosivity) by USEPA Method SW846; and, (c) Total Petroleum Hydrocarbons Diesel Range Organics/Gasoline Range Organics (TPH DRO/GRO) by USEPA Method 8015B.

2.0 CORRIDOR INFORMATION

2.1 Corridor Location, Description, and Use

The Corridor is located within the Flushing Meadow/Corona Park in Queens, New York. The Corridor, identified on Figures 1 through 4, is approximately 470 linear feet in length and consists of Porpoise Pedestrian Bridge at Perimeter Road between New York Avenue and Avenue of Enterprise.

Ground markings are visible in roadway areas in the vicinity of the bridge and indicate the presence of buried utilities including storm sewer, sanitary sewer, and electrical service. No overhead electrical or communication lines were noted.

The Corridor is a bridge over Flushing Creek and surrounded by the Flushing Meadows Golf Center, aquatic center, and open park space. The only property of potential environmental concern based on the business nature noted around the Corridor includes the Flushing Meadows Golf Center located to the south. Golf courses are considered an environmental concern due to their possible use of pesticides.

2.2 Description of Surrounding Properties

The Corridor traverses a park and is surrounded by park properties and railroad lines to the north. A high volume expressway, Route 678/Van Wyck Expressway, is located to the east of the Corridor. The only property of potential environmental concern based on the nature of operation noted surrounding the Corridor during the Corridor inspection includes the Long Island Railroad lines and Mets-Willets Point Station to the north and northwest. Based on historical records, former industrial operations existed to the east of the Van Wyck Expressway. One (1) property was identified as a risk site which is as follows:

- Former Auto Repair Garage and Manufacturing Facility (currently being redeveloped), 4106-4110 Delong Rd. (Moderate Risk Site No. 3)

2.3 Corridor and Regional Topographic Setting

Based on a review of the United States Geological Survey (USGS.) 7.5-Minute Quadrangle Maps, Flushing, New York, dated 1979, the elevation of the Corridor is approximately 20 feet above mean sea level (MSL). The topography of the park area is generally flat with a gentle slope from southeast to northwest. The topography in the immediate Corridor area generally slopes toward Flushing Creek. A copy of the topographic map is presented in Figure 1.

2.4 Corridor and Regional Geology

Site and regional geology and hydrogeology are based on information provided in the Geologic Map of New York State (Lower Hudson Sheet) and the USGS “Hydrogeologic Framework of Long Island, New York.”

Consolidated bedrock is of Precambrian and Paleozoic age. The thickness of the unconsolidated sequence ranges from 0 to approximately 1,300 ft bgs from north to south. Outcrops of metamorphic bedrock can be found along the northwest portions of Queens.

Physiographically, Queens County is part of the Long Island Hydrogeologic System. In a roughly north-south cross section, the geology can be characterized as a wedge-shaped layer of Cretaceous and Pleistocene age unconsolidated sediments, that increase in thickness towards the south-southeast. Several impermeable clay layers are found within these sediments, generally creating three (3) distinct aquifers. Potable water is primarily withdrawn from the deepest of these aquifers (the Lloyd Aquifer) in southeastern Queens County and is protected.

The subsurface soils encountered during this Phase II SCI consisted predominantly of fill material, which included rocks, ash, and tree roots, from 6 inches below grade to approximately 15 ft bgs. The fill material was overlying peat which was overlying brown, grey, and black colored fine to medium grained sand with some clay. Groundwater was encountered within the on-site borings at depths ranging from 4 to 6 ft bgs.

2.5 Corridor and Regional Hydrogeology

The first regional unconfined aquifer encountered is the upper glacial aquifer. The depth to the water table varies but generally follows topography. In areas of higher topography associated with glacial moraine deposits, the water table is as deep as 100 ft bgs. Closer to sea level, groundwater can occur at depths of 5 to 10 ft bgs. Generally, groundwater flow follows topography, with flow from higher to lower elevations. The terminal moraine deposits act as a groundwater divide with regional flow to the north, north of the moraine and to the south, south of the moraine.

The nearest surface water body to the Corridor is Flushing Creek which is located below the Porpoise Pedestrian Bridge. Flushing Creek feeds into Flushing Bay which has a Combined Sewer Overflow (CSO) and is part of the East River.

Site and regional hydrogeology are based on information provided in the USGS “Hydrogeologic Framework of Long Island, New York.” Groundwater generally occurs within the unconsolidated sediments. Groundwater also occurs in bedrock within secondary permeability zones such as fractures, faults, and foliation planes. Regional groundwater flow direction is generally controlled by regional topography with groundwater flow from higher to lower elevations. Based on the Corridor topography, groundwater flow direction is anticipated to be north. Estimated groundwater levels and/or flow direction(s) may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations. Groundwater was encountered within the on-site borings at depths ranging from 4 to 6 ft bgs.

Based upon the information supplied through the Environmental Data Resources, Inc. (EDR) of Shelton, CT, Radius Map Report, the westerly portion of the Corridor falls within a national wetland area. This wetland has been identified through the United States Fish and Wildlife Service as E1UBL.

The EDR report has also indicated that the entire Corridor is located within the limits of 100-year flood zone. The Federal Emergency Management Agency (FEMA) map panel number for the Corridor is 3604970114F and the flood zone ID is AR (EL13/14).

3.0 PHASE I CA EVALUATION

Based on a review of the EDR database report and historical Sanborn maps, as well as the performance of a Corridor reconnaissance, the Corridor and surrounding properties were evaluated to determine land use and associated potential environmental risks. The sites identified as a result of this evaluation are placed in a Risk Category of “High”, “Moderate”, or “Low” in accordance with Risk Criteria that have been established by NYCDDC to allow for consistent evaluation of the potential risk posed by sites. The Risk Criteria established by NYCDDC are identified in Table 1.

3.1 Site Reconnaissance

On March 18 and 20, 2015, Mr. Scott Swanson and Ms. Eva Jakubowska (respectively) of LiRo conducted a site reconnaissance of the Corridor utilizing the available project materials. The available materials included an environmental database report and Sanborn Maps provided by EDR, which were used to identify and evaluate individual properties within and adjacent to the Corridor.

The Site reconnaissance consisted of a walk-through survey of the Corridor to identify sites of potential environmental concern, based on their current use and/or conditions, within and adjacent to the Corridor areas. The entire Corridor was visually inspected during the walk-through and the sites categorized as initial “High” or initial “Moderate” risk sites were photographed. The visual inspection included the Corridor and properties within approximately 100 feet of the centerline along the Corridor.

The Corridor is a bridge over Flushing Creek and surrounded by the Flushing Meadows Golf Center, aquatic center, and open park space. The only property of potential environmental concern based on the business nature noted around the Corridor is the Flushing Meadows Golf Center located to the south. Golf courses are considered an environmental concern due to their possible use of pesticides.

The Corridor traverses a park is primarily surrounded by park properties and railroad lines to the north of the Corridor area. The only property of potential environmental concern based on the nature of operation noted surrounding the Corridor includes the Long Island Railroad lines and Mets-Willets Point Station to the north and northwest. Shea Stadium is located beyond the Long Island Railroad, to the northwest of the Site.

Summaries of the site reconnaissance are presented in Table 2. Site photographs are presented in Appendix A.

3.2 Historical Sanborn Map Review

EDR provided historical Sanborn Fire Insurance Maps of the project area. The purpose of the Sanborn Map review was to identify sites of potential environmental concern within and adjacent to the Corridors based on their historical use. LiRo reviewed copies of Sanborn Fire Insurance Maps for parcels within and adjacent to the Corridor for the years 1902, 1903, 1914, 1917, 1950, 1981, 1982, 1986, 1988, 1989, 1991, 1992, 1993, 1994, 1995, 1999, 2001, 2002, 2003, 2004, 2005, and 2006. This information was utilized during the site reconnaissance to correlate historical properties of environmental concern with their current street address, block, and lot information. Summaries of the historical map review are presented in Table 2. Copies of the Sanborn Fire Insurance Maps are provided as Appendix B.

3.3 Regulatory Agency Database Report Review

A regulatory agency database report was obtained from EDR to review available regulatory agency environmental databases to identify sites that are known to be contaminated or have potential environmental concerns within a 1/8 mile radius of the Corridor. Databases searched by EDR include, but are not limited to: National Priority List (NPL); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); CERCLIS No Further Remedial Action Planned (NFRAP); Resource Conservation and Recovery Act (RCRA) Transportation, Storage, and Disposal facilities (TSD), RCRA Corrective Action Report (CORRACTS); RCRA Generators (GEN); Emergency Response Notification System (ERNS); New York State Inactive Hazardous Waste Sites (State Sites); New York State 1990 Spills (Spills-1990), New York State Solid Waste Landfills (SWL), New York State Regulated Underground Storage Tanks / Aboveground Storage Tanks (REG UST/AST), and New York State Leaking Underground Storage Tanks (LUST). The Environmental Regulatory Database Report is provided as Appendix C. The results of the assessment are presented in Table 2, Summary Assessment Results (High and Moderate Risk Sites).

3.4 Findings and Recommendations of the Phase I CA

LiRo conducted a site reconnaissance of the Corridor to document current use and conditions; reviewed Sanborn Fire Insurance Maps to document historical uses; and, reviewed regulatory agency databases to identify sites with reported environmental conditions that could impact the scope during construction of the project.

Based on the Risk Criteria protocol established by the NYCDDC, LiRo identified three (3) sites categorized as initially having a “High” risk with respect to potential impact on the project.

The sites were re-classified because they are outside of the Corridor limits or new modifying information indicating a lower risk. Modifying information could include sites with spills that had been closed by the New York State Department of Environmental Conservation (NYSDEC), sites identified on one (1) or more databases with no evidence or records of spills or other concerns, and older sites that were redeveloped or located such that they no longer posed significant risks. Based on modifying information, LiRo recommends that all three (3) initial “High” risk sites be reclassified as “Moderate” risk sites.

Therefore, the final evaluation has identified three (3) final “Moderate” risk sites with respect to potential impact on the project corridor. The final “Moderate” risk sites are listed below and identified on Figure 3.

MODERATE RISK SITES

- 1) Flushing Meadows Golf Center, Perimeter Rd. (Moderate Risk Site No. 1)
- 2) Long Island Railroad and Mets-Willets Point Station, North and Northwest of the Corridor (Moderate Risk Site No. 2)
- 3) Former Auto Repair Garage and Manufacturing Facility (currently being redeveloped), 4106-4110 Delong Rd. (Moderate Risk Site No. 3)

Based on the findings of the Phase I CA, the three (3) “Moderate” risk sites could impact the subsurface (soil and/or groundwater) of the Corridor. As requested by the NYCDDC, LiRo also conducted a Phase II SCI and the results are presented in this report.

4.0 PHASE II SCI CORRIDOR EVALUATION

Prior to field work being initiated, LiRo submitted an application and insurance certification to obtain a City of New York Parks and Recreation Permit to Perform Work on park property. The Permit to Perform Work was issued to LiRo April 14, 2015.

4.1 Soil Quality Investigation

Four (4) borings (SB-01 through SB-04) were advanced to a terminal depth of 20 ft bgs using a GeoProbe[®] direct push drill rig by ADT on April 17, 2015. Prior to direct push advancement, borings were cleared to a depth of 6 ft bgs using a vacuum excavator/air knife combination. Soil samples were collected using 5-foot long, 2-inch diameter Macro Core[®] stainless steel samplers equipped with polyvinyl chloride (PVC) liners. Soil boring locations are shown on Figure 4. The designations and sampling intervals for the soil samples that were submitted to the laboratory are included in Table 3. Boring logs/temporary well construction details are provided in Appendix D. The locations of each boring are described below:

- **SB-01** – This boring is located approximately 39 feet northwest of the west end of the Corridor and between the Corridor and “Moderate” Risk Site No. 2.
- **SB-02** – This boring is located approximately 21 feet south of the west end of the Corridor and between the Corridor and “Moderate” Risk Site No. 1.
- **SB-03** – This boring is located approximately 75 feet southeast of the east end of the Corridor and between the Corridor and “Moderate” Risk Site No. 1.
- **SB-04** – This boring is located approximately 25 feet north of the east end of the Corridor and between the Corridor and “Moderate” Risk Site No. 3.

Soil from each boring was classified and examined for visual evidence (i.e., staining, discoloration) and any olfactory indications (i.e., odors) of contamination. Continuous soil samples were collected from each of the borings at 2 foot intervals. In addition, a PID was used to screen the soil for VOC vapors.

In order to identify representative conditions relative to the presence of SVOCs, metals, pesticides, herbicides, and PCBs over the entire soil column in each boring, composite soil samples were collected by mixing the soil from the entire column in a stainless steel bowl. Boring composite samples were collected from the four (4) soil borings (SB-01 through SB-04).

In order to identify representative conditions relative to the presence of VOCs, grab soil samples were collected from the 6-inch interval above the water table.

In order to identify representative conditions for disposal purposes, one (1) waste classification (WC-01) sample was collected from soil borings SB-01 through SB-04.

Soil classification information, including stratigraphy, is documented on the boring logs included in Appendix D. All boring equipment was cleaned by rinsing with tap water, scrubbed with Alconox, then rinsed with deionized water again between each sample interval. In addition, a clear plastic liner was used inside the sampler for neat recovery of the soil cores. Following the completion of each boring, the boreholes were back-filled with drill cuttings. The borings that were advanced in the grass areas and were sealed with drill cuttings and soil to the surface grade.

4.2 Groundwater Quality Investigation

As groundwater may be encountered within the depths associated with the proposed excavation, two (2) groundwater samples were collected for screening and laboratory analysis during the soil boring activities. TWPs (TWP-02 and TWP-04) were installed in soil borings SB-02 and SB-04 on April 17, 2015. Groundwater was encountered at depths ranging from 4 to 6 ft bgs. For the installation of the TWPs, the GeoProbe[®] unit was advanced to a depth of 20 ft bgs, approximately 10 to 15 feet into the encountered water table. The TWPs consisted of a 15-foot length section of 1 inch diameter schedule 40 PVC screen and a 5-foot length section of 1 inch diameter schedule 40 PVC riser. A groundwater sample was collected from each TWP for screening and laboratory analysis via dedicated Teflon tubing and check valves. All tubing was new, clean, and unused and was properly disposed after use. Upon extraction, the groundwater samples were examined for identification of visual evidence (i.e., discoloration, sheen) and any olfactory indications (i.e., odors) of contamination were noted.

The locations of the TWPs are provided in Figure 4.

4.3 Laboratory Analyses

The soil samples were submitted to Con-Test, a NYSDOH certified laboratory (No. 10899). Field derived Quality Assurance/Quality Control samples (i.e., field blank, trip blank, duplicate) were not collected for this project. Laboratory analytical reports are included in Appendix E.

The grab soil samples were analyzed for USEPA TCL VOCs by Method 8260. The boring composite soil samples were analyzed for: (1) TCL BN/A extractable SVOCs by USEPA Method 8270; (2) TAL metals by USEPA Method 6010B/7010; (3) TCL pesticides by USEPA Method 8081A; (4) TCL herbicides by Method 8151A; and, (5) TCL PCBs by USEPA Method 8082.

The waste characterization soil sample was analyzed for: (1) the USEPA Full TCLP parameters, including PCBs; (2) the RCRA Characteristics (ignitability, reactivity, and corrosivity); and, (3) TPHC DRO/GRO.

The groundwater samples were analyzed for the parameters required by the NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (Daily Limit).

4.4 Data Evaluation

In order to evaluate the subsurface soil quality, the laboratory analytical results of the grab and composite soil samples were compared with the regulatory standards identified in: (1) NYSDEC Subpart 375-6: Remedial Program Unrestricted and Restricted Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); (2) NYSDEC CP-51 Soil Cleanup Levels (CP-51 SCLs); and, (3) CP-51 Supplemental Soil



Cleanup Objectives (SSCOs). The laboratory analytical results of the waste classification soil sample was compared with the Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and NYSDEC Part 371. In order to evaluate the groundwater quality, the laboratory analytical results for the groundwater samples were compared to the NYCDEP Sewer Discharge Criteria.

5.0 PHASE II SCI FINDINGS

This section discusses the analytical data and findings for the activities discussed in Section 4.0. Boring logs and temporary well construction details can be found in Appendix D. Complete analytical data reports are included in Appendix E.

5.1 Field Screening

Field screening did not identify any visual or olfactory evidence of impacts or elevated PID readings within the soil borings advanced. Refer to Table 3 for a summary of environmental boring data.

5.2 Soil and Groundwater Laboratory Analytical Results

5.2.1 Volatile Organic Compounds (VOCs) in Soil

Up to three (3) VOCs, benzene, methylene chloride, and/or mixed xylenes, were reported in all four (4) grab samples collected. One (1) of the three VOCs, methylene chloride, was reported at a concentration above the Unrestricted Use (Track 1) SCO in two (2) of the four (4) grab samples collected (SB-02 and SB-03). Methylene chloride is a common laboratory solvent and its detection is likely due to laboratory contamination. The remaining VOCs (i.e., benzene and mixed xylenes) are characteristic of residuals from releases of petroleum products. Refer to Table 4 for a summary of TCL VOC detections.

5.2.2 Semi-Volatile Organic Compounds (SVOCs) in Soil

SVOCs were reported above laboratory reporting limits in two (2) of the four (4) composite soil samples collected. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were reported at concentrations exceeding the Unrestricted Use (Track 1) and Restricted Use (Track 2) SCOs as well as the CP-51 SCLs/SSCOs in one (1) (SB-01-COMP) of four (4) soil samples collected. The reported SVOCs are polycyclic aromatic hydrocarbons (PAHs) and may be indicative of the presence of historic fill material placed at the Site and are characteristic of residuals from releases of petroleum products. SVOCs were also reported within SB-02-COMP but below applicable standards. Refer to Table 5 for a summary of TCL SVOC detections.

5.2.3 Target Analyte List Metals (TAL Metals) in Soil

Metals were reported in all four (4) composite samples collected. Arsenic, barium, cadmium, copper, iron, lead, mercury, and/or zinc were reported above the Unrestricted Use (Track 1) SCOs, Restricted Use (Track 2) SCOs, and/or CP-51 SSCOs in the four (4) composite samples collected. Based on the consistency of iron results, the reported concentrations are likely attributed to background levels. The reported concentration of arsenic, barium, cadmium, copper, lead, mercury, and zinc may be attributed to contaminants in fill material placed throughout the Corridor. Refer to Table 6 for a summary of TAL metals detections.

5.2.4 Pesticides in Soil

Pesticides, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT, were reported in two (2) of the four (4) composite soil samples at concentrations that exceed the Unrestricted Use (Track 1) SCO. These detections may be attributed to contaminants in historic fill material placed throughout the Corridor and/or historic application and/or usage of pesticides at the park. Refer to Table 7 for a summary of pesticide detections.

5.2.5 Herbicides in Soil

No herbicides were reported in the four (4) composite samples collected. Refer to Table 8.

5.2.6 PCBs in Soil

No PCBs were reported in the four (4) composite samples collected. Refer to Table 9.

5.2.7 Waste Classification of Soil

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were within the acceptable RCRA ranges. TCLP VOCs, SVOCs, herbicides, pesticides, PCBs, and TPHC GRO were not reported in the one (1) waste classification soil sample (WC-01) collected. While four (4) metals, barium, cadmium, chromium, and lead, were detected, no exceedances were reported. DRO were reported at a concentration of 82 milligrams per kilograms (mg/kg) in the one (1) waste classification soil sample collected. There is no regulatory standard for DRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste classification prior to off-site disposal. Refer to Table 10 for a summary of TCLP parameters, RCRA characteristics, and TPHC DRO/GRO results.

5.2.8 Analysis of NYCDEP Parameters in Groundwater

Two (2) grab groundwater samples (TWP-02 and TWP-04) were analyzed for the parameters required by the NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (Daily Limit). Lead and zinc exceeded NYCDEP Sewer Discharge Limitations in groundwater sample TWP-04. In addition, Total Suspended Solids (TSS) were reported exceeding the NYCDEP Sewer Discharge Limitation in both groundwater samples (TWP-02 and TWP-04). The TSS exceedances were reported at 4,200 milligrams per liter (mg/L) in TWP-02 and 22,000 mg/L in TWP-04. These concentrations exceed the NYCDEP Sewer Discharge Limitation of 350 mg/L. The presence of TSS in the groundwater is attributed to the fact that unfiltered groundwater samples were collected from TWPs and not permanent monitoring wells. However, the groundwater samples collected from TWPs are considered to be representative of conditions to be encountered during construction activities. The presence of lead and zinc may be attributed to background levels.

Based on the lead, zinc, and TSS exceedances, the groundwater does not meet NYCDEP discharge criteria. Refer to Table 11 for a summary of detected NYCDEP parameters in groundwater.

6.0 PHASE II SCI CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Phase II SCI, which included the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following conclusions are presented:

- Field screening did not identify any visual or olfactory evidence of impacts or elevated PID readings within the soil borings advanced.
- Laboratory analytical results identified VOC, SVOC, and DRO impacted soils along the Corridor. Concentrations of metals and pesticides above regulatory levels were also reported in the subsurface soils. The presence of VOCs, SVOCs, DRO, metals, and pesticides in the subsurface soils may be attributed to: (a) residuals from potential releases of petroleum products from the risk sites identified on and within the vicinity of the Corridor; (b) contaminants in historic fill material placed on the Corridor; and/or, (c) natural background levels (metals);
- The waste characterization soil sample did not exhibit hazardous waste characteristics; and,
- The groundwater samples collected along the Corridor do not meet the NYCDEP Sewer Discharge Criteria for sanitary or combined sewers. Concentrations of lead, zinc, and/or TSS were reported exceeding the NYCDEP Sewer Discharge Limitation in the groundwater samples collected from the two (2) TWPs (TWP-02 and TWP-04). The presence of TSS in the groundwater is attributed to the fact that unfiltered groundwater samples were collected from TWPs and not permanent monitoring wells. However, the groundwater samples collected from TWPs are considered to be representative of conditions to be encountered during construction activities. The presence of lead and zinc may be attributed to background levels.

Based on the results of the field investigation and laboratory analytical results, LiRo recommends the following:

- The Contract documents should identify provisions for managing, handling, transporting, and disposing of non-hazardous contaminated soil (i.e., SVOCs, metals, pesticides, and DRO) and a contingency plan for managing non-hazardous petroleum-impacted soils in case they are encountered during the subsurface activities. The Contractor should be required to submit a Material Handling Plan (MHP) to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Due to the presence of SVOCs, metals, pesticides, and DRO exceeding the applicable regulatory standards above applicable standards within the proposed Corridor, dust control mitigation procedures are recommended during excavation activities to minimize the production and dispersion of fugitive airborne dust. To minimize the release of potential airborne contaminants as a direct result of construction activities, the Contractor should develop and implement a Community Air Monitoring Plan (CAMP). The CAMP should be developed in accordance with NYSDEC Division of Environmental Remediation (DER)-10 Requirements. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain construction activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the surrounding community located downwind from potential airborne contaminant releases as a direct result of future construction work activities. Specific requirements

should be reviewed for each situation in consultation with New York State Department of Health (NYSDOH) to ensure proper applicability;

- Based on the Phase II SCI field activities, groundwater was encountered between 4 and 5 ft bgs. Dewatering may be necessary during construction activities within the Corridor. Since lead, zinc, and TSS were reported in the groundwater samples at concentrations exceeding the NYCDEP Sewer Discharge Limitations, groundwater may require pre-treatment for these parameters prior to discharge. Therefore, should dewatering be necessary during construction activities within the Corridor to a sanitary or combined sewer, the contractor should be required to obtain a NYCDEP sewer discharge permit;
- In addition, if discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and,
- Before beginning any excavation activity, the contractor should submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety, and Health Administration (OSHA), the NYSDOH, and any other applicable regulations. The HASP should identify the possible locations along the Corridor and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate environmental concerns (i.e., dust control procedures for SVOCs, metals, pesticides, and DRO).

7.0 STATEMENT OF LIMITATIONS

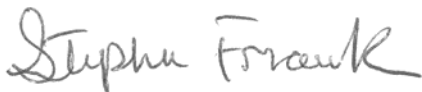
The data presented and the opinions expressed in this report are qualified as stated in the attachment to this section of the report (see Appendix G). Qualifications of the Environmental Professionals associated with this project are included within Appendix F.

Report Prepared By:



Amy Hewson
Senior Environmental Analyst

Report Reviewed By:



Stephen Frank
Senior Geologist

Report Reviewed By:



Robert Kreuzer
Project Manager

FIGURES

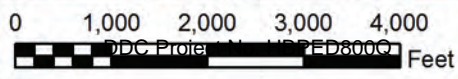
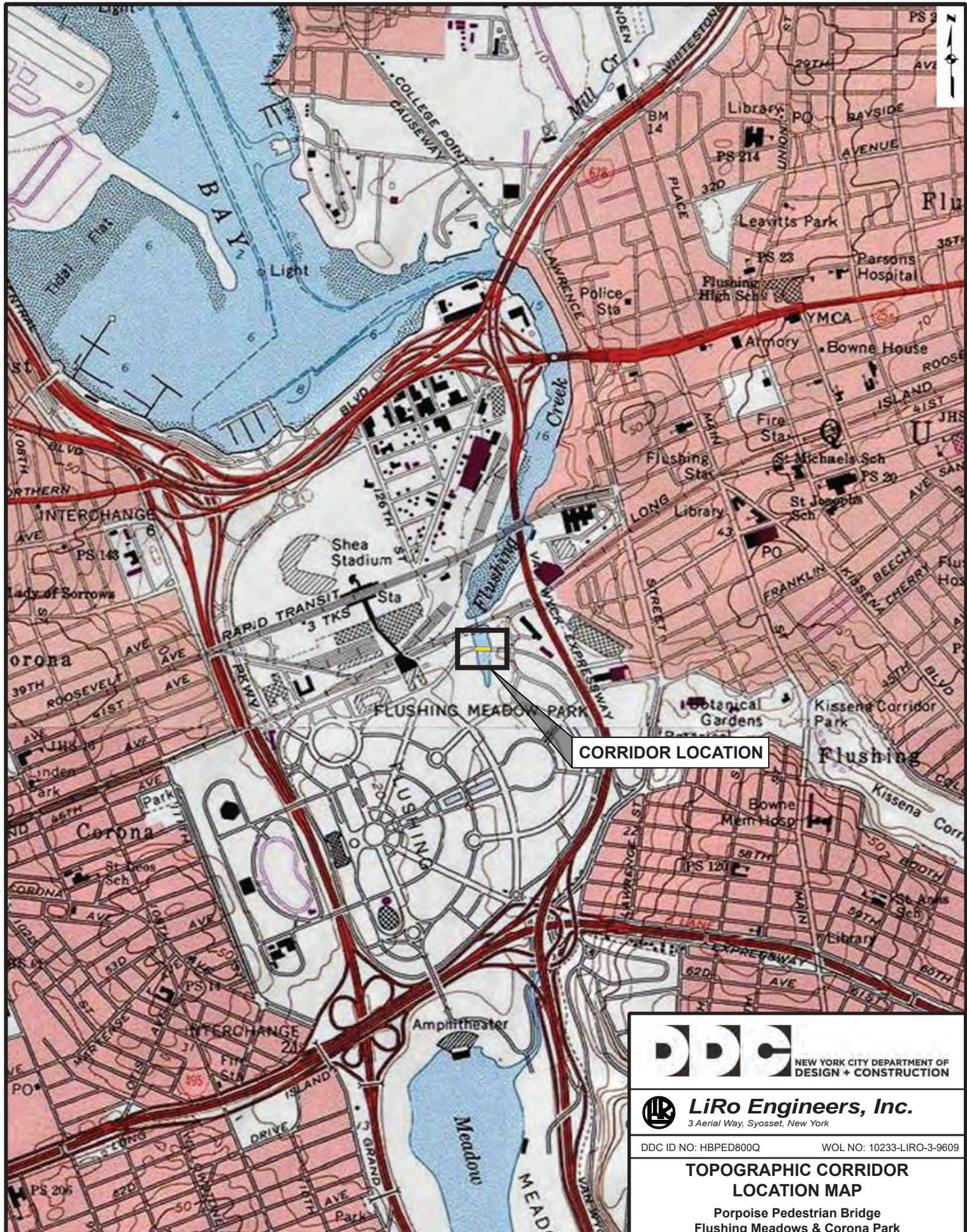
FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP

FIGURE 2 – CORRIDOR AREA MAP

FIGURES 3 – RISK SITES ON CORRIDOR AREA MAP

FIGURES 4 – SAMPLE LOCATION PLAN

J:\15-008-0265 2015 DDC BEGIS\Projects\Phase I - Phase II\10233 Porpoise Ped Bridge CAR\CAD\REPORT\Porpoise Topo Map.ai



USGS 7.5 Minute Topographic Map
40073-G7 Flushing - 1979

DDC NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION

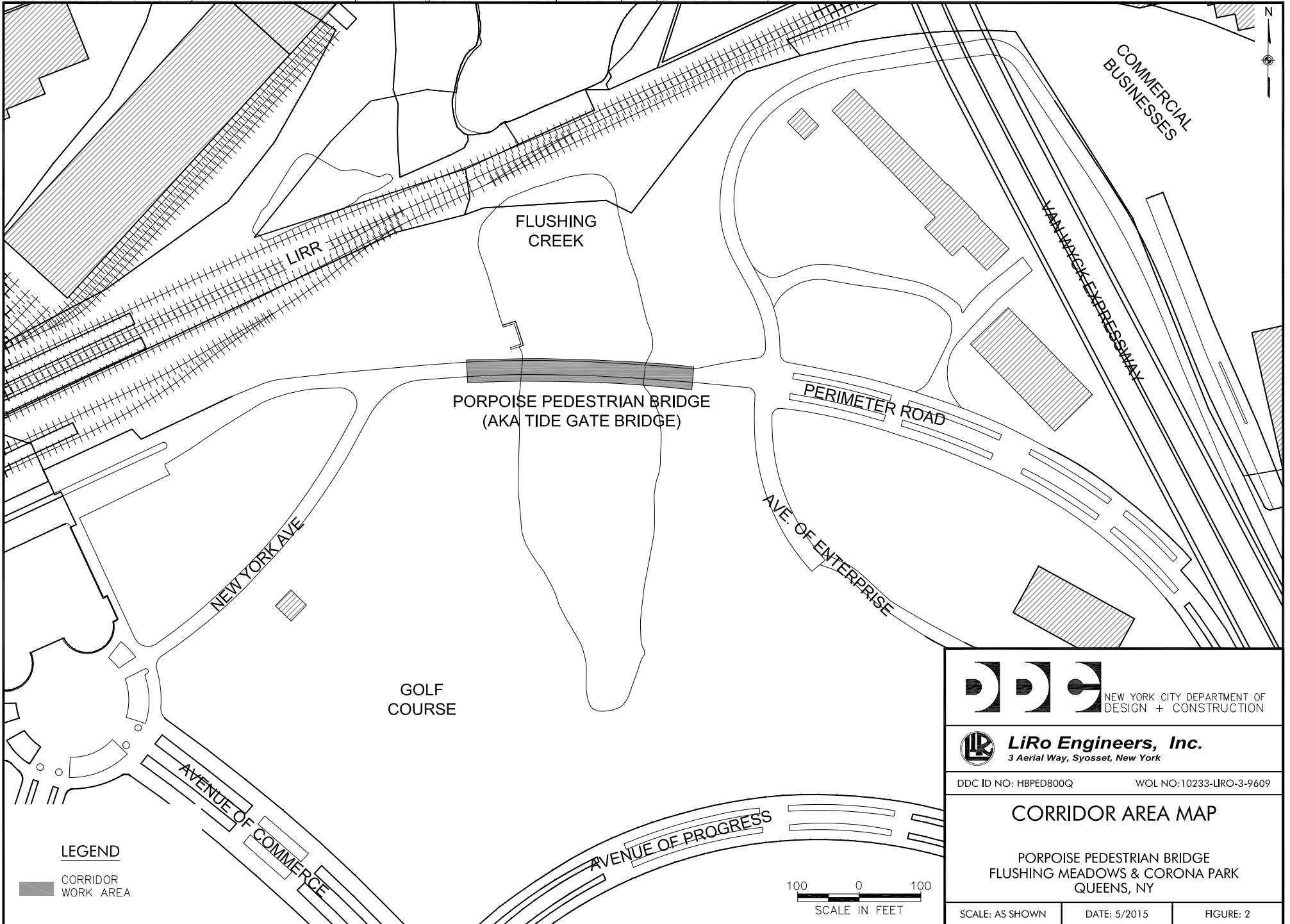
LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York


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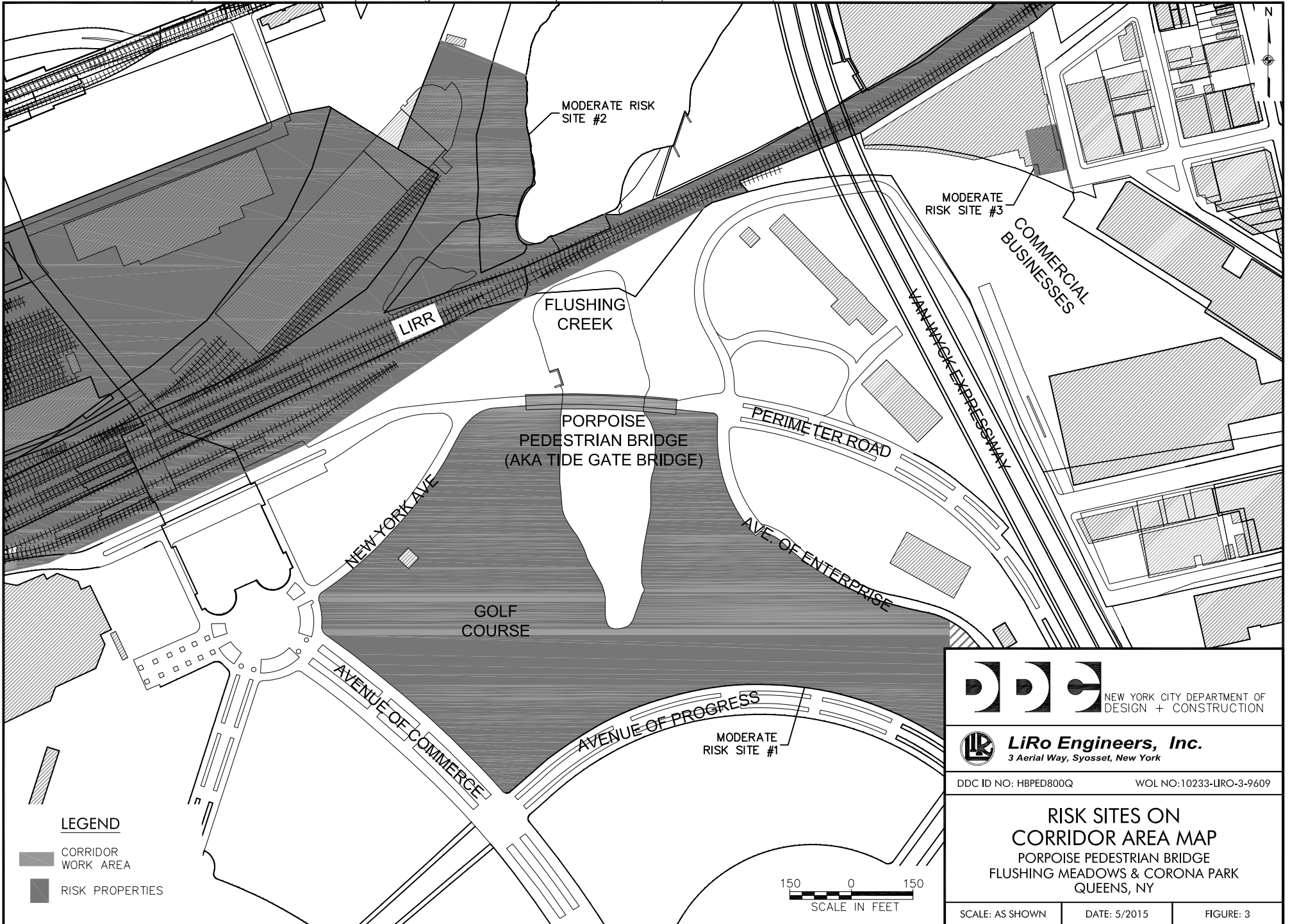
TOPOGRAPHIC CORRIDOR LOCATION MAP

Porpoise Pedestrian Bridge
Flushing Meadows & Corona Park
Queens, New York

Version Date: May 16, 2022
SCALE: AS SHOWN DATE: 5/2015 FIGURE: 1



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DDC ID NO: HBPED800Q	WOL NO: 10233-LIRO-3-9609
CORRIDOR AREA MAP	
PORPOISE PEDESTRIAN BRIDGE FLUSHING MEADOWS & CORONA PARK QUEENS, NY	
SCALE: AS SHOWN	DATE: 5/2015
FIGURE: 2	



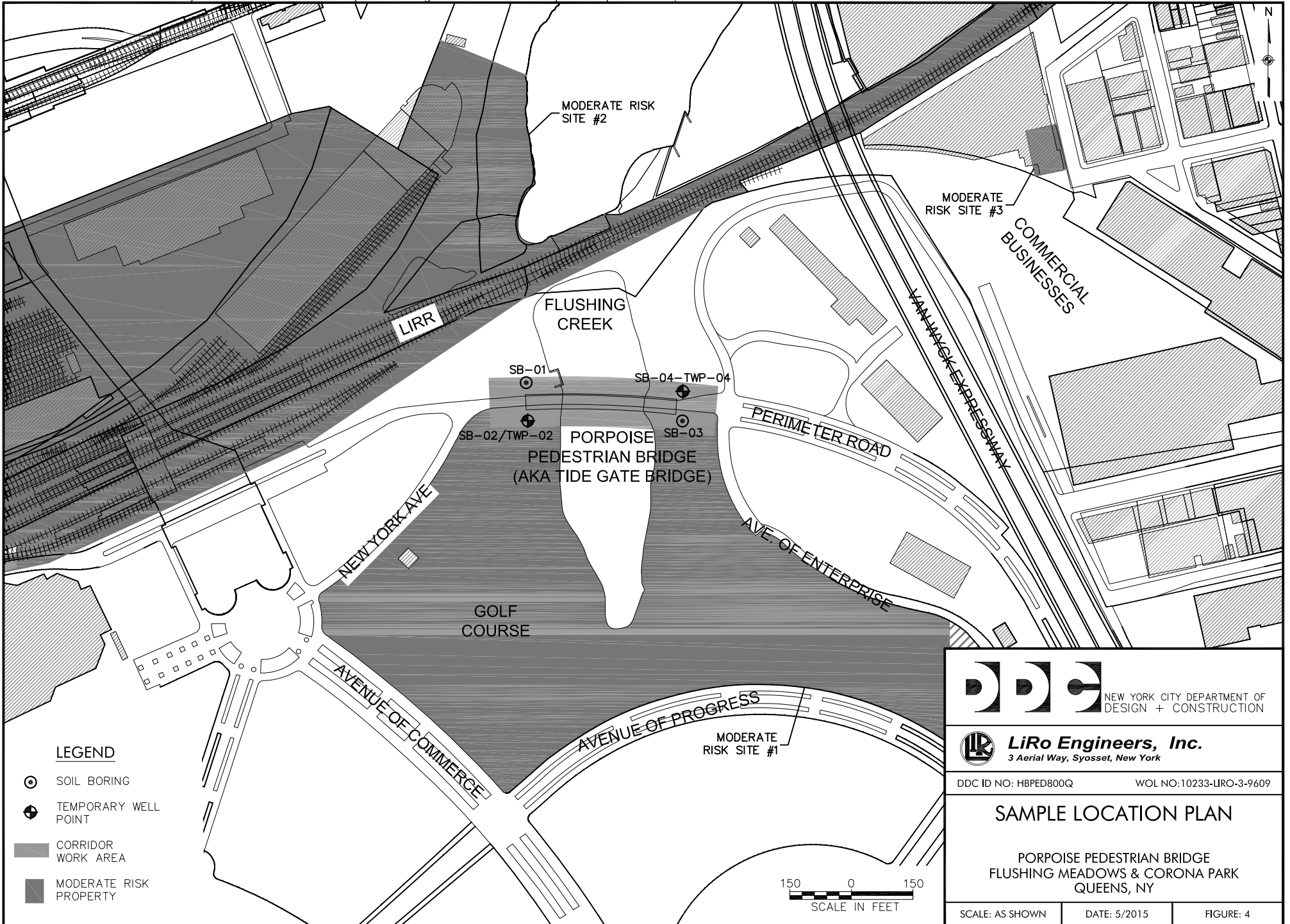
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RISK SITES ON CORRIDOR AREA MAP
PORPOISE PEDESTRIAN BRIDGE
FLUSHING MEADOWS & CORONA PARK
QUEENS, NY

SCALE: AS SHOWN DATE: 5/2015 FIGURE: 3



LEGEND

- ⊙ SOIL BORING
- ⊕ TEMPORARY WELL POINT
- ▨ CORRIDOR WORK AREA
- MODERATE RISK PROPERTY



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WOL NO:10233-LIRO-3-9609

SAMPLE LOCATION PLAN

PORPOISE PEDESTRIAN BRIDGE
FLUSHING MEADOWS & CORONA PARK
QUEENS, NY

SCALE: AS SHOWN

DATE: 5/2015

FIGURE: 4

TABLES

TABLE 1 – NYCDDC SPECIFIC RISK CRITERIA

**TABLE 2 - SUMMARY ASSESSMENT RESULTS
(HIGH AND MODERATE RISK SITES)**

TABLE 3 – SUMMARY OF FIELD INVESTIGATION

**TABLE 4 – SUMMARY OF TARGET COMPOUND LIST (TCL)
VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL**

**TABLE 5 – SUMMARY OF TARGET COMPOUND LIST (TCL) SEMI-
VOLATILE ORGANIC COMPOUNDS (SVOCs) DETECTED IN SOIL**

**TABLE 6 – SUMMARY OF TARGET ANALYTE LIST (TAL) METALS
DETECTED IN SOIL**

TABLE 7 – SUMMARY OF PESTICIDES DETECTED IN SOIL

TABLE 8 - SUMMARY OF HERBICIDES DETECTED IN SOIL

**TABLE 9 –SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs)
DETECTED IN SOIL**

TABLE 10 – SUMMARY OF WASTE CHARACTERIZATION IN SOIL

TABLE 11 – GROUNDWATER QUALITY

TABLE 1. NYCDDC SPECIFIC RISK CRITERIA

Risk Category	Land Use
HIGH	<p>REGULATORY AGENCY DATABASE</p> <ul style="list-style-type: none"> • Sites identified on the regulatory agency database as NYSDEC New York Spills (NY Spills) or Leaking Storage Tank Incident Report (LTANKS) facilities. • Sites identified on the regulatory agency database as Federal sites (NPL, CERCLIS, ERNS, TRIS, FINDS, Superfund, Hazardous Waste Site HWS or HWDS, or RCRA Hazardous Waste Generators); State sites (Voluntary Cleanup Program, Brownfield, Manufactured Gas Plant MGP, Auto Station, Dry Cleaners, Underground Storage Tank (UST) or Above Ground Storage Tank (AST) facilities); and Local sites (Brownfield, E designated for underground storage testing protocol) <p>HISTORICAL SANBORN MAP REVIEW AND SITE RECONNAISSANCE</p> <ul style="list-style-type: none"> • Industrial/Manufacturing facilities (i.e., paper mills, pulp mills, meat packing plants, textiles, wood finishing/preserving, fertilizers, cement, steel works, furnaces, foundries, motor vehicle parts and accessories). • Petroleum retailers, storage facilities including gasoline filling stations, bulk terminals, oil refineries, historic gasoline tanks or underground storage tanks. • Motor vehicle dealerships with service stations, general automotive repair shops and service stations, and vehicle maintenance. • Chemical Storage including Dry Cleaning Facilities and Funeral Homes/Mortuaries/Crematorium. • Electric power/natural gas generation and transmission facilities (i.e., generators, substations, transformers, etc.). • Transportation facilities - airports, heliports, bus depots, railroad track rights-of-way, harbors and marinas. • Waste treatment, waste water treatment, and disposal facilities (i.e., landfills).
MODERATE	<ul style="list-style-type: none"> • Hospitals, clinics, doctor’s offices • Construction activities (i.e., highway and street construction, wrecking and demolition work) • Commercial office buildings • Parks, community gardens, golf course • Vacant land, previously developed • Printers, photo shops • High Intensity Agriculture (i.e., nurseries, farms, feed lots, orchards, etc.)
LOW	<ul style="list-style-type: none"> • Retail buildings, restaurants, etc. • Private residences, apartment buildings • Schools and playgrounds • Vacant land, no prior development

*NYCDDC Specific Criteria is based on a review of a Regulatory Agency Database with a 1/8 mile search radius surrounding the Corridor, historical Sanborn maps, and a Site Reconnaissance of the Corridor and surrounding areas. A list of acronyms is available in the Regulatory Agency Database included as Appendix C.

TABLE 2
SUMMARY ASSESSMENT RESULTS (HIGH AND MODERATE RISK SITES)
 PORPOISE PED BRIDGE
 FLUSHING MEADOWS / CORONA PARK - QUEENS, NY
 DDC Project No. HBPED800Q
 Work Order No. 10233-LIRO-3-9609

Risk Site # / Map ID / Photo Log No.	Site Address / Block-Lot ¹	Site Reconnaissance Information	Historical Use (Sanborn Map Review)	Regulatory Agency Database Review ²	Potential Environmental Concern	Initial Risk Category (High or Moderate)	Modifying Information	Final Risk Category (High or Moderate)	Recommendations
MODERATE RISK SITES									
Moderate Risk Site No. 1 / Map ID NA / Photo Log No. 1	Flushing Meadows Golf Center to the south / A portion of Block 2018, Lot 1	On Currently the Flushing Meadows Golf Center	1950: Hortis, Inc. - no details provided.	NA	History as a golf course and possibly manufacturing in 1950.	High	No regulatory listings.	Moderate	One (1) boring on either end of the Corridor.
Moderate Risk Site No. 2 / Map ID A7 / Photo Log No. 2	Railroad Tracks and train terminal to north-northwest / A portion of Block 2018, Lots 300, 350, and 1000	Off - Cross-gradient Currently the Long Island Railroad	1914-2006: Railroad tracks.	RCRA-SQG, Manifest	History includes multiple railroad tracks and a train terminal.	High	Off the Corridor.	Moderate	One (1) boring on the northwest portion of the Corridor.
Moderate Risk Site No. 3 / Map ID C3 / Photo Log No. 3	Auto Repair & Garage, 4110 Delong Rd. / Manufacturing Facility, 4106 Delong Rd. / A portion of Block 5066, Lot 255	Off - Up-gradient Currently being redeveloped commercially.	1994: Auto repair & garage and manufacturing facility.	LTANK - closed	History of an auto repair garage and a manufacturing facility.	High	Off the Corridor.	Moderate	One (1) boring on the northeast portion of the Corridor.

¹ Block and Lot information obtained from NYC Open Accessible Space Information System (OASIS), where available.

² The regulatory database search information for this table was obtained from Environmental Data Resources, Inc. (EDR).



**Table 3. Summary of Environmental Boring Data
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY**

Boring No.	Sample ID	PID (ppm)	Sample Interval (ft bgs)	Total VOCs (ug/kg)	Total SVOCs (ug/kg)	Metals Exceed (Yes/No) ¹	Total Pesticides (ug/kg)	Herbicides Exceed (Yes/No)	Total PCBs (ug/kg)	Depth to Water (ft bgs)	Total Depth (ft bgs)	Other Comments
SB-01	SB-01-5.5-6	<1	5.5-6	46	NA	NA	NA	NA	NA	6	20	No PID readings or visual or olfactory evidence of impacts were detected.
	SB-01-COMP		Composite	NA	29,660	Yes	20	ND	ND			
SB-02	SB-02-3.5-4	<1	3.5-4	57	NA	NA	NA	NA	NA	4	20	No PID readings or visual or olfactory evidence of impacts were detected.
	SB-02-COMP		Composite	NA	3,080	Yes	ND	ND	ND			
SB-03	SB-03-4.5-5	<1	4.5-5	57	NA	NA	NA	NA	NA	5	20	No PID readings or visual or olfactory evidence of impacts were detected.
	SB-03-COMP		Composite	NA	ND	Yes	122	ND	ND			
SB-04	SB-04-4.5-5	<1	4.5-5	37	NA	NA	NA	NA	NA	5	20	No PID readings or visual or olfactory evidence of impacts were detected.
	SB-04-COMP		Composite	NA	ND	Yes	ND	ND	ND			

Notes:

1. Metal(s) exceeds CP-51 SCLs/SSCOs, Unrestricted Use (Track 1) SCOs, and/or Restricted Residential Use (Track 2) SCOs.

All soil samples were analyzed for Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs), Pesticides, PCBs, Herbicides, and Target Analyte List (TAL) Metals.

NA = Not Analyzed/Not Applicable

ND = Non detect

ft bgs = feet below grade surface

ppm = parts per million

ug/kg = microgram per kilogram



**Table 4. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY**

TCL VOC	Part 375-6.8 (a) Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Part 375-6.8 (b) Restricted Use (Track 2) Residential Soil Cleanup Objectives (SCOs)	CP-51 Soil Cleanup Levels (SCLs) / Supplemental Soil Cleanup Objectives (SSCOs) - Residential	Sample ID, Date Collect, and Depth (ft bgs)			
				SB-01-5.5-6 4/17/2015	SB-02-3.5-4 4/17/2015	SB-03-4.5-5 4/17/2015	SB-04-4.5-5 4/17/2015
				5.5-6	3.5-4	4.5-5	4.5-5
Benzene	60	2,900	60	14	ND	ND	ND
Methylene chloride	50	51,000	NS	27	57	57	37
Xylene (Mixed)	260	100,000	260	5.1	ND	ND	ND
Total VOCs	NS	NS	NS	46	57	57	37

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010).

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - Soil Cleanup Levels for Gasoline Contaminated Soils, Table 3 - Soil Cleanup Levels for Fuel oil Contaminated Soil

Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



**Table 5. Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY**

TCL SVOC	Part 375-6.8 (a) Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Part 375-6.8 (b) Restricted Use (Track 2) Residential Soil Cleanup Objectives (SCOs)	CP-51 Soil Cleanup Levels (SCLs) / Supplemental Soil Cleanup Objectives (SSCOs) - Residential	Sample ID, Date Collect, and Depth (ft bgs)			
				SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP
				4/17/2015	4/17/2015	4/17/2015	4/17/2015
				Composite	Composite	Composite	Composite
Anthracene	100,000	100,000	100,000	570	ND	ND	ND
Benzo(a)anthracene	1,000	1,000	1,000	2,400	330	ND	ND
Benzo(a)pyrene	1,000	1,000	1,000	2,400	ND	ND	ND
Benzo(b)fluoranthene	1,000	1,000	1,000	3,100	380	ND	ND
Benzo(g,h,i)perylene	100,000	100,000	100,000	1,700	ND	ND	ND
Benzo(k)fluoranthene	800	1,000	800	1,100	ND	ND	ND
bis(2-Ethylhexyl)phthalate	NS	NS	50,000	430	ND	ND	ND
Butylbenzylphthalate	NS	NS	100,000	1,300	ND	ND	ND
Carbazole	NS	NS	NS	210	ND	ND	ND
Chrysene	1,000	1,000	1,000	2,500	330	ND	ND
Dibenz[a,h]anthracene	330	330	330	440	ND	ND	ND
Flouranthene	100,000	100,000	100,000	4,200	610	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	500	1,700	ND	ND	ND
Napthalene	12,000	100,000	12,000	510	ND	ND	ND
Phenanthrene	100,000	100,000	100,000	2,800	660	ND	ND
Pyrene	100,000	100,000	100,000	4,300	770	ND	ND
Total SVOCs	NS	NS	NS	29,660	3,080	ND	ND

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010).

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - Soil Cleanup Levels for Gasoline Contaminated Soils, Table 3 - Soil Cleanup Levels for Fuel oil Contaminated Soil

Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



**Table 6. Summary of Target Analyte List (TAL) Metals Detected in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY**

Target Analyte List Metal	Part 375-6.8 (a) Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Part 375-6.8 (b) Restricted Use (Track 2) Residential Soil Cleanup Objectives (SCOs)	CP-51 Soil Cleanup Levels (SCLs) / Supplemental Soil Cleanup Objectives (SSCOs) - Residential	Sample ID, Date Collect, and Depth (ft bgs)			
				SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP
				4/17/2015 Composite	4/17/2015 Composite	4/17/2015 Composite	4/17/2015 Composite
Aluminum	NS	NS	NS	5,900	16,000	7,500	11,000
Antimony	NS	NS	NS	6.4	10	ND	5.5
Arsenic	13	16	NS	15	13	3.6	ND
Barium	350	350	NS	700	85	750	300
Beryllium	7.2	14	NS	0.6	1.2	0.53	0.8
Cadmium	2.5	2.5	NS	3	0.64	ND	0.46
Calcium	NS	NS	NS	11,000	2,800	1,900	3,200
Chromium (total)	30	36	NS	30	36	23	30
Cobalt	NS	NS	30	7.2	12	9.7	8.4
Copper	50	270	NS	790	35	47	80
Iron	NS	NS	2,000	37,000	39,000	32,000	23,000
Lead	63	400	NS	1,400	130	140	190
Magnesium	NS	NS	NS	2,700	7,600	2,200	2,800
Manganese	1,600	2,000	NS	350	810	410	280
Mercury	0.18	0.81	NS	1.8	0.11	0.27	0.44
Nickel	30	140	NS	25	24	20	17
Potassium	NS	NS	NS	770	4,600	960	1,200
Silver	2	36	NS	1.3	ND	ND	ND
Sodium	NS	NS	NS	260	5,500	190	1,100
Vanadium	NS	NS	100	26	54	25	37
Zinc	109	2,200	NS	1,200	160	600	230

Notes:

All concentrations are in parts per million (ppm or mg/kg)

ft bgs = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010).

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - Soil Cleanup Levels for Gasoline Contaminated Soils, Table 3 - Soil Cleanup Levels for Fuel oil Contaminated Soil

Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



Table 7. Summary of Pesticides Detected in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY

Pesticides	Part 375-6.8 (a) Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Part 375-6.8 (b) Restricted Use (Track 2) Residential Soil Cleanup Objectives (SCOs)	CP-51 Soil Cleanup Levels (SCLs) / Supplemental Soil Cleanup Objectives (SSCOs) - Residential	Sample ID, Date Collect, and Depth (ft bgs)			
				SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP
				4/17/2015	4/17/2015	4/17/2015	4/17/2015
				Composite	Composite	Composite	Composite
4,4'-DDD	3.3	2,600	NS	5.5	ND	24	ND
4,4'-DDE	3.3	1,800	NS	7.4	ND	17	ND
4,4'-DDT	3.3	1,700	NS	6.7	ND	81	ND
Total Pesticides	NS	NS	NS	20	ND	122	ND

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010).

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - Soil Cleanup Levels for Gasoline Contaminated Soils, Table 3 - Soil Cleanup Levels for Fuel oil Contaminated Soil

Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



Table 8. Summary of Herbicides Detected in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY

Herbicides	Part 375-6.8 (a) Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Part 375-6.8 (b) Restricted Use (Track 2) Residential Soil Cleanup Objectives (SCOs)	CP-51 Soil Cleanup Levels (SCLs) / Supplemental Soil Cleanup Objectives (SSCOs) - Residential	Sample ID, Date Collect, and Depth (ft bgs)			
				SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP
				4/17/2015	4/17/2015	4/17/2015	4/17/2015
				Composite	Composite	Composite	Composite
Total Herbicides	NS	NS	NS	ND	ND	ND	ND

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010).

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - Soil Cleanup Levels for Gasoline Contaminated Soils, Table 3 - Soil Cleanup Levels for Fuel oil Contaminated Soil

Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



**Table 9. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY**

PCBs	Part 375-6.8 (a) Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Part 375-6.8 (b) Restricted Use (Track 2) Residential Soil Cleanup Objectives (SCOs)	CP-51 Soil Cleanup Levels (SCLs) / Supplemental Soil Cleanup Objectives (SSCOs) - Residential	Sample ID, Date Collect, and Depth (ft bgs)			
				SB-01-COMP	SB-02-COMP	SB-03-COMP	SB-04-COMP
				4/17/2015	4/17/2015	4/17/2015	4/17/2015
				Composite	Composite	Composite	Composite
Total PCBs	100	1,000	NS	ND	ND	ND	ND

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ft bgs = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

CP-51 SCLs = New York State Department of Environmental Conservation (NYSDEC) CP-51 – Soil Cleanup Guidance (CP-51) (October 21, 2010).

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - Soil Cleanup Levels for Gasoline Contaminated Soils, Table 3 - Soil Cleanup Levels for Fuel oil Contaminated Soil

Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives



**Table 10. Summary of Waste Characterization in Soil
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY**

Parameter	6 NYCRR Part 371 and RCRA	Sample ID, Date Collect
		WC-01 4/17/2015
VOCs ¹	ug/L	ND
SVOCs ¹	ug/L	ND
PESTs ¹	ug/L	ND
HERBs ¹	ug/L	ND
METALS¹	ug/L	
Barium	100,000	1,500
Cadmium	1,000	150
Chromium	5,000	110
Lead	5,000	3,400
PCBs ¹	ug/Kg	ND
MISC. PARAMETERS (units)		
Reactivity Sulfide (mg/kg)	500	ND
Reactivity Cyanide (mg/kg)	250	ND
pH (SU)	2-12.5	7.7
Ignitability	>140 °F	Absent
TPHC Diesel Range Organics (mg/kg)	NS	82
TPHC Gasoline Range Organics (mg/kg)	NS	ND

Notes:

- ft bgs = feet below grade surface
- NS = No Standard
- ND = Compound not detected above method detection limit (see attached lab report for mdl's)
- SU = Standard unit
- mg/Kg = milligram per kilogram
- ug/L = microgram per liter
- ug/Kg = microgram per kilogram
- °F = Degrees Fahrenheit

Shading = Concentration exceeds 6 NYCRR Part 371 and RCRA Toxicity Characteristic Regulatory Levels for Hazardous Waste.



Table 11. Groundwater Quality
Phase II Subsurface Corridor Investigation for Porpoise Pedestrian Bridge
Flushing Meadows/Corona Park, Queens, NY

Parameter ¹	NYCDEP Limitations to Sanitary or Combined Sewers		Well ID and Date Collected	
			TWP-02	TWP-04
			4/17/2015	4/17/2015
CBOD ⁴	NS	mg/L	ND	33
Chloride ⁴	NS	mg/L	7,400	3,300
Flash Point - Liquid/Solid	> 140	°F	>212	>212
pH	5-12	pH	7.1	7.3
Temperature	150	°F	NA	NA
TKN	NS	mg/L	16	15
Total Nitrogen ⁴	NS	mg/L	16	15
Total Solids ⁴	NS	mg/L	13,000	13,000
Total Suspended Solids (TSS) ³	350	mg/L	4,200	22,000
Cadmium (instantaneous/composite)	2 / 0.69	mg/L	ND	0.019
Copper	5	mg/L	0.2	2.1
Lead	2	mg/L	0.5	6.3
Mercury	0.05	mg/L	0.00012	ND
Nickel	3	mg/L	ND	0.16
Zinc	5	mg/L	0.36	6.3

Notes:

NS = No Standard/Not Sampled

NA = Not Analyzed

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

mg/L = milligram per liter

ug/L = microgram per liter

°F = Fahrenheit

Shaded = Concentration exceeds NYCDEP Limitations for Effluent to Sanitary or Combined Sewers (daily limit).

¹ All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

² Analysis for non-polar materials was performed by USEPA method 1664.

³ For discharge \geq 10,000 gallons per day (gpd), the TSS limit is 350 mg/l. For discharge $<$ 10,000 gpd, the limit is determined on a case by case basis.

⁴ Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids, and Total Nitrogen are required if proposed discharge \geq 10,000 gpd.



APPENDIX A

SITE RECONNAISSANCE PHOTOGRAPHS

SITE PHOTOGRAPHS



#1 – Flushing Meadows Golf Center (Moderate Risk Site No. 1).



#2 – Long Island Railroad train and a portion of the terminal (Moderate Risk Site No. 2).

SITE PHOTOGRAPHS



#3 – Site of the former auto repair garage and manufacturing facility at 4106-4110 Delong Road (Moderate Risk Site No. 3).



APPENDIX B

SANBORN FIRE INSURANCE MAPS

1994 Certified Sanborn Map

BIRD OF QUEENS, N.Y. - 1863

24

MAY 1963

FORMERLY
NEW YORK WORLD'S FAIR 1964-1965 CORPORATION
© 1960, 1961, 1962, 1963 NEW YORK WORLD'S FAIR
1964 - 1965 CORPORATION

SCALE:
NOW SITE OF FLUSHING MEADOWS
CORONA PARK



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Certification # 92D8-4F73-B1E1

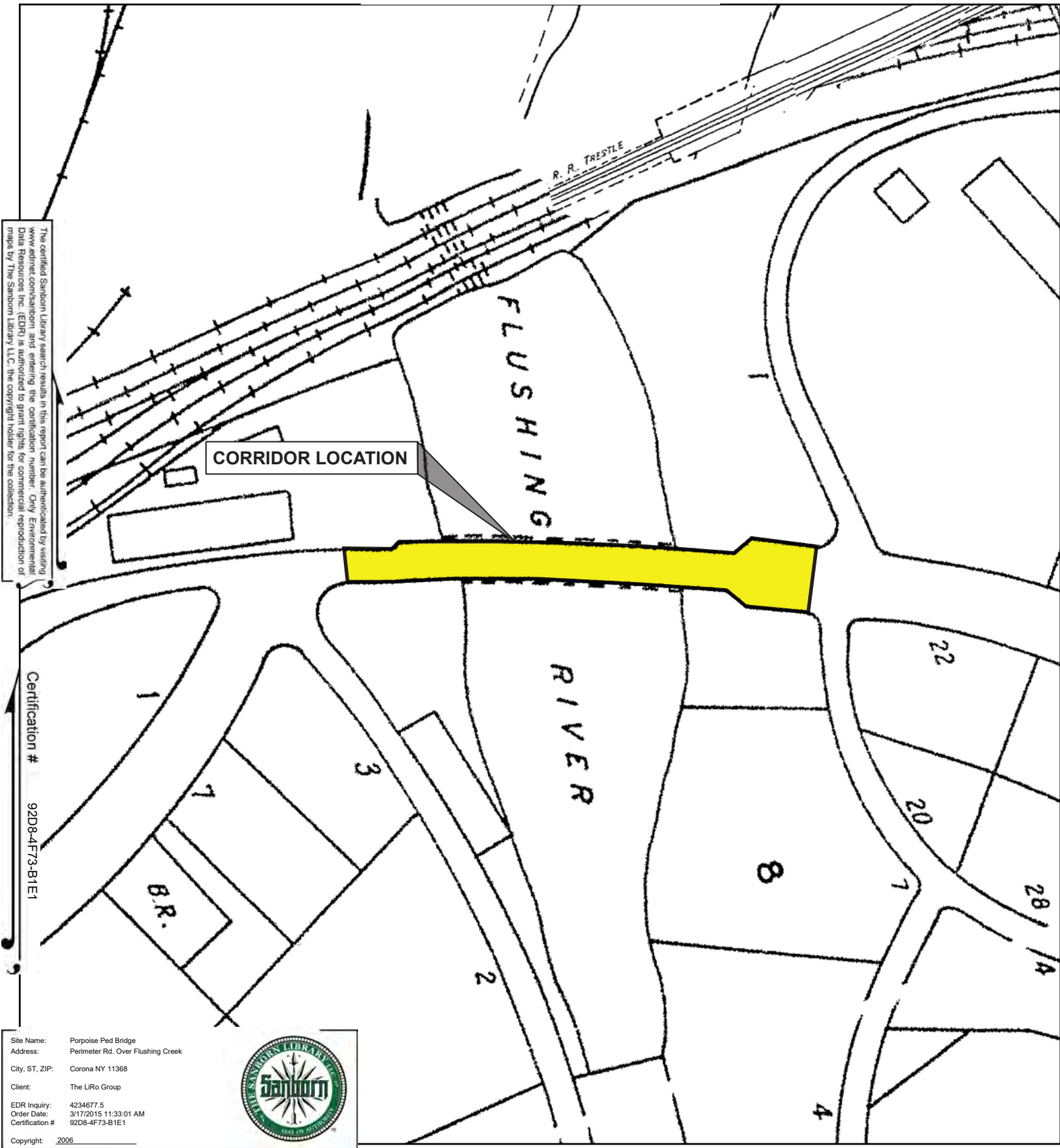
Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LIRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:11 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1994



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 HAZ - 44

Version Date: May 16, 2022
 4234677 - 5 page 19

2006 Certified Sanborn Map



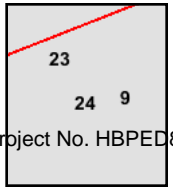
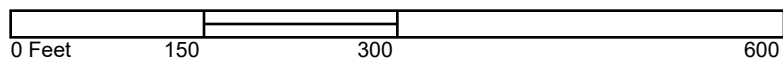
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Certification # 92D8-4F73-B1E1

Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
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This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



Volume 11, Sheet 9
 Volume 19, Sheet 23
 Volume 19, Sheet 24

DDC Project No. HBPED800Q

HAZ. - 45

Version Date: May 16, 2022
 4234677 - 5 page 9





Porpoise Ped Bridge

Perimeter Rd. Over Flushing Creek

Corona, NY 11368

Inquiry Number: 4234677.5

March 17, 2015

Certified Sanborn® Map Report



Certified Sanborn® Map Report

3/17/15

Site Name:

Porpoise Ped Bridge
Perimeter Rd. Over Flushing
Corona, NY 11368

Client Name:

The LiRo Group
690 Delaware Avenue
Buffalo, NY 14209



EDR Inquiry # 4234677.5

Contact: Amy Hewson

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: Porpoise Ped Bridge
Address: Perimeter Rd. Over Flushing Creek
City, State, Zip: Corona, NY 11368
Cross Street:
P.O. # 13-110-0265
Project: BEGS
Certification # 92D8-4F73-B1E1



Sanborn® Library search results
Certification # 92D8-4F73-B1E1

Maps Provided:

2006	1999	1989	1917
2005	1995	1988	1914
2004	1994	1986	1903
2003	1993	1982	1902
2002	1992	1981	
2001	1991	1950	

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

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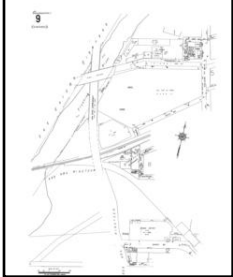
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Sanborn Sheet Thumbnails

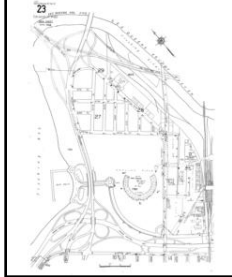
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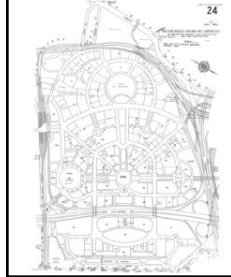
2006 Source Sheets



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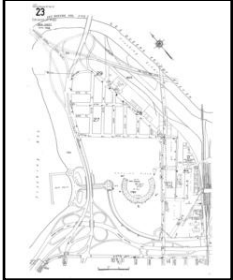


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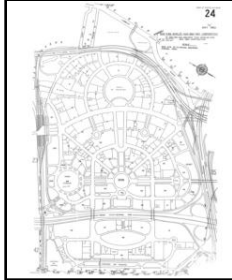


Volume 19, Sheet 24

2005 Source Sheets



Volume 19, Sheet 23



Volume 19, Sheet 24

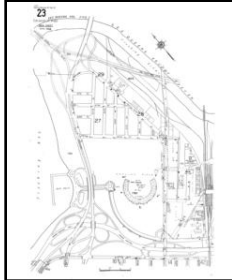


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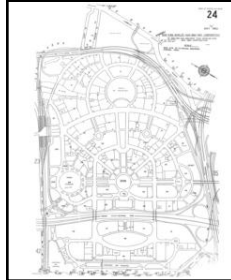
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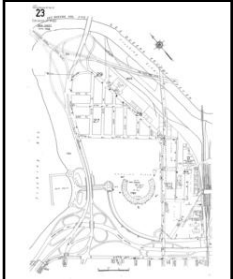


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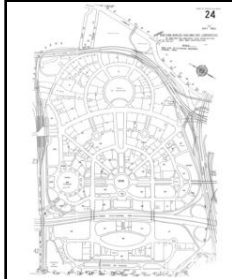


Volume 19, Sheet 24

2003 Source Sheets



Volume 19, Sheet 23



Volume 19, Sheet 24

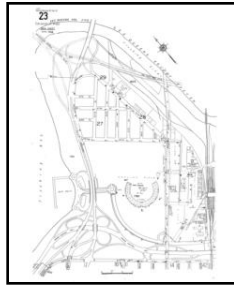


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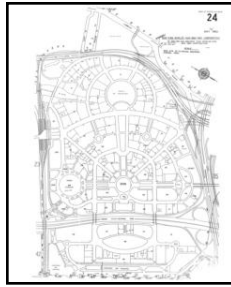
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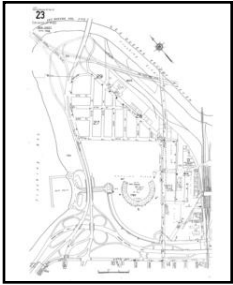


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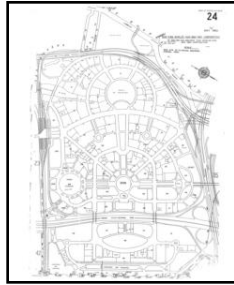


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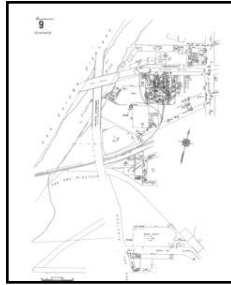
2001 Source Sheets



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Volume 19, Sheet 24

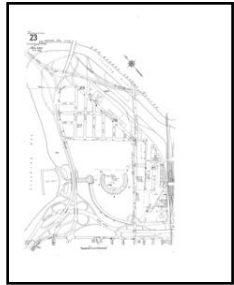


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1999 Source Sheets



Volume 11, Sheet 9

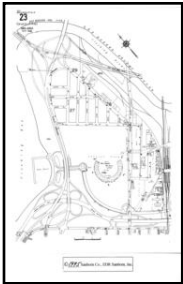


Volume 19, Sheet 23



Volume 19, Sheet 24

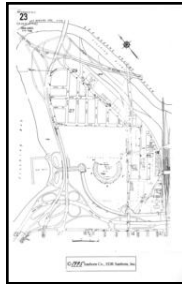
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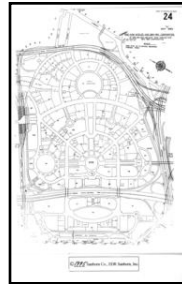
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Volume 19, Sheet 24



Volume 19, Sheet 23



Volume 19, Sheet 24

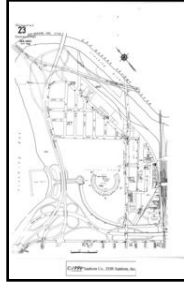


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1994 Source Sheets



Volume 11, Sheet 9

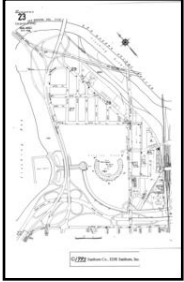


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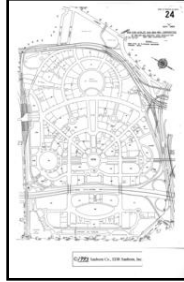


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1993 Source Sheets



Volume 19, Sheet 23



Volume 19, Sheet 24



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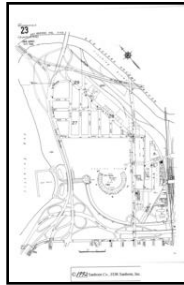


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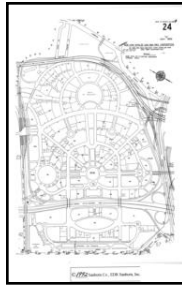
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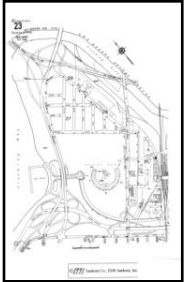


Volume 19, Sheet 23



Volume 19, Sheet 24

1991 Source Sheets



Volume 19, Sheet 23



Volume 19, Sheet 24



Volume 11, Sheet 9

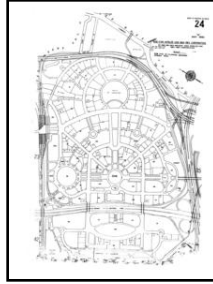


Volume 11, Sheet 10

1989 Source Sheets

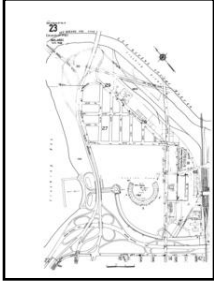


Volume 19, Sheet 23



Volume 19, Sheet 24

1988 Source Sheets



Volume 19, Sheet 23

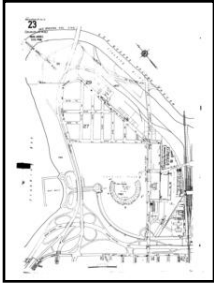


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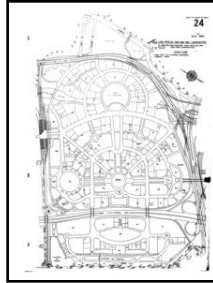


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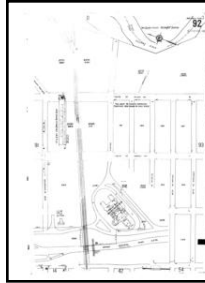
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Volume 19, Sheet 23



Volume 19, Sheet 24



Volume 19, Sheet 92

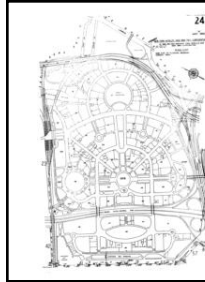
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Volume 11, Sheet 9

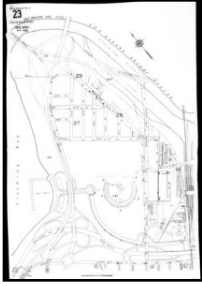


Volume 19, Sheet 23



Volume 19, Sheet 24

1981 Source Sheets



Volume 19, Sheet 23



Volume 19, Sheet 24

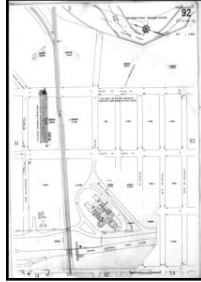
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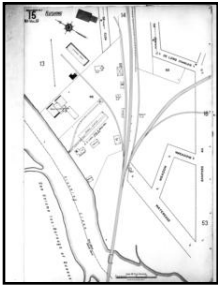


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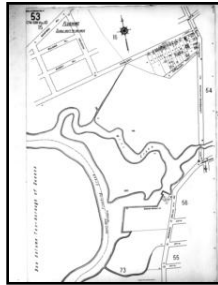


Volume 19, Sheet 92

1917 Source Sheets



Volume 11, Sheet 15



Volume 11, Sheet 53

1914 Source Sheets



Volume 10, Sheet 118

1903 Source Sheets



Volume 5, Sheet 61



Volume 5, Sheet 68

1902 Source Sheets



Volume 3, Sheet 121

2006 Certified Sanborn Map

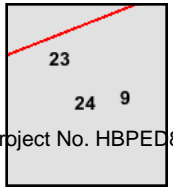
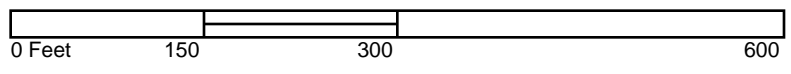


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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 2006



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- Volume 19, Sheet 23
- Volume 19, Sheet 24

HAZ. - 54



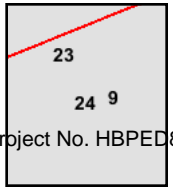
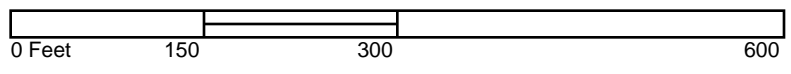
2005 Certified Sanborn Map



Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 2005



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Volume 19, Sheet 23
 Volume 19, Sheet 24
 Volume 11, Sheet 9

DDC Project No. HBPED800Q

HAZ. - 55

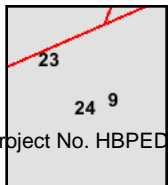
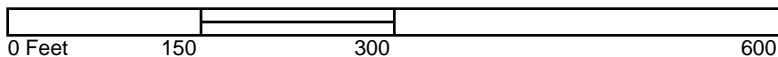
Version Date: May 16, 2022
 4234677 - 5 page 10



2004 Certified Sanborn Map



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Volume 11, Sheet 9
 Volume 19, Sheet 23
 Volume 19, Sheet 24

DDC Project No. HBPED800Q

HAZ. - 56

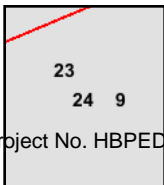
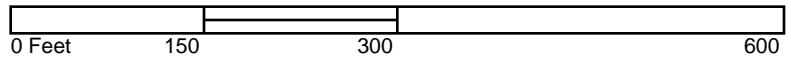
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 4234677 - 5 page 11



2003 Certified Sanborn Map



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Volume 19, Sheet 23
Volume 19, Sheet 24
Volume 11, Sheet 9

DDC Project No. HBPED800Q

HAZ. - 57

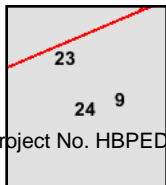
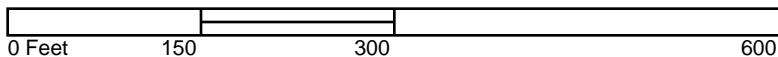
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4234677 - 5 page 12



2002 Certified Sanborn Map



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 Volume 19, Sheet 23
 Volume 19, Sheet 24

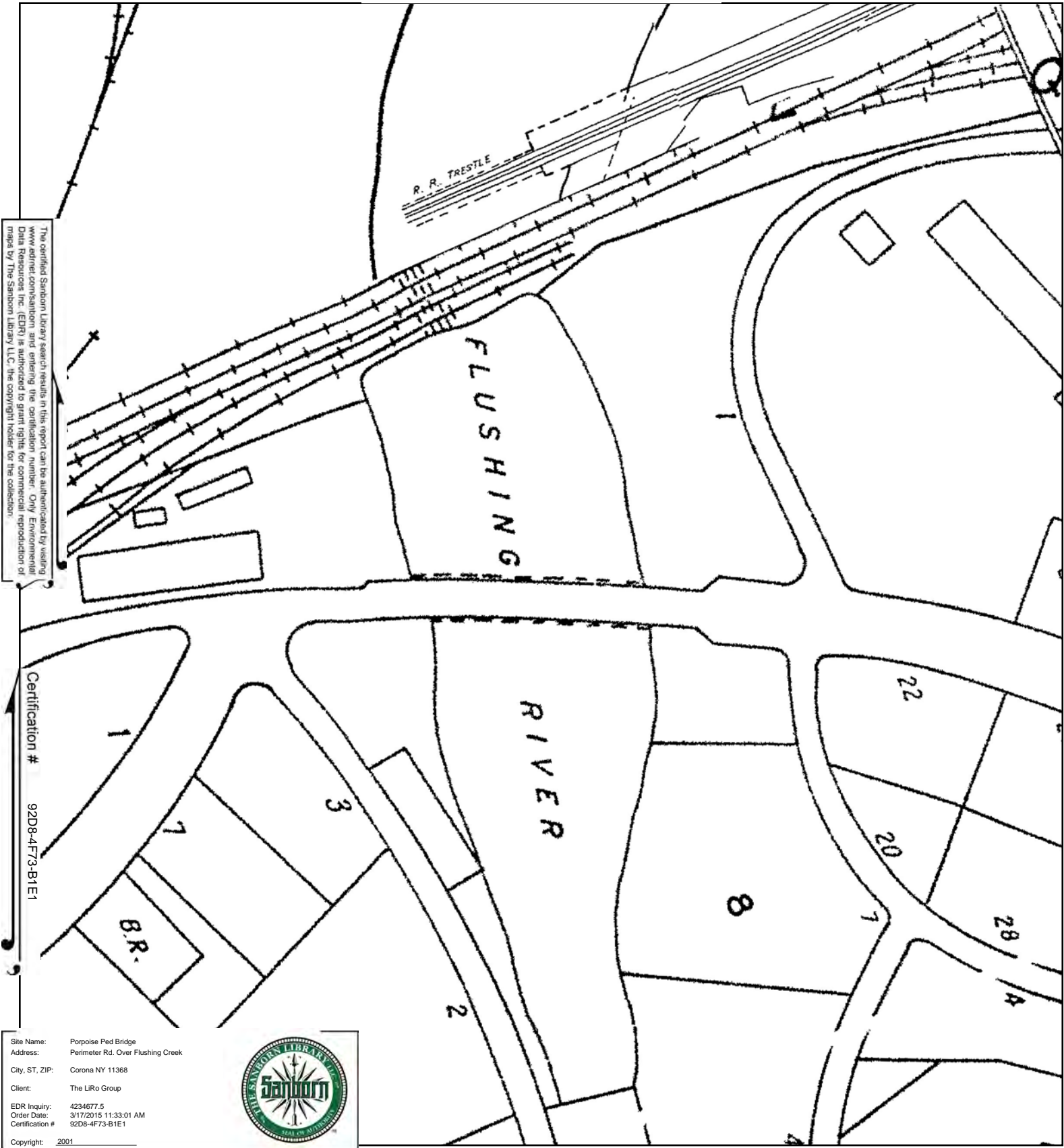
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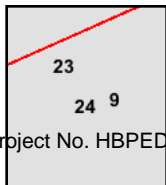
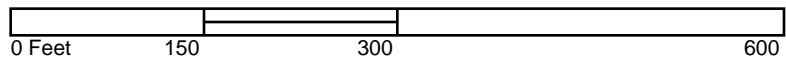
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 4234677 - 5 page 13



2001 Certified Sanborn Map



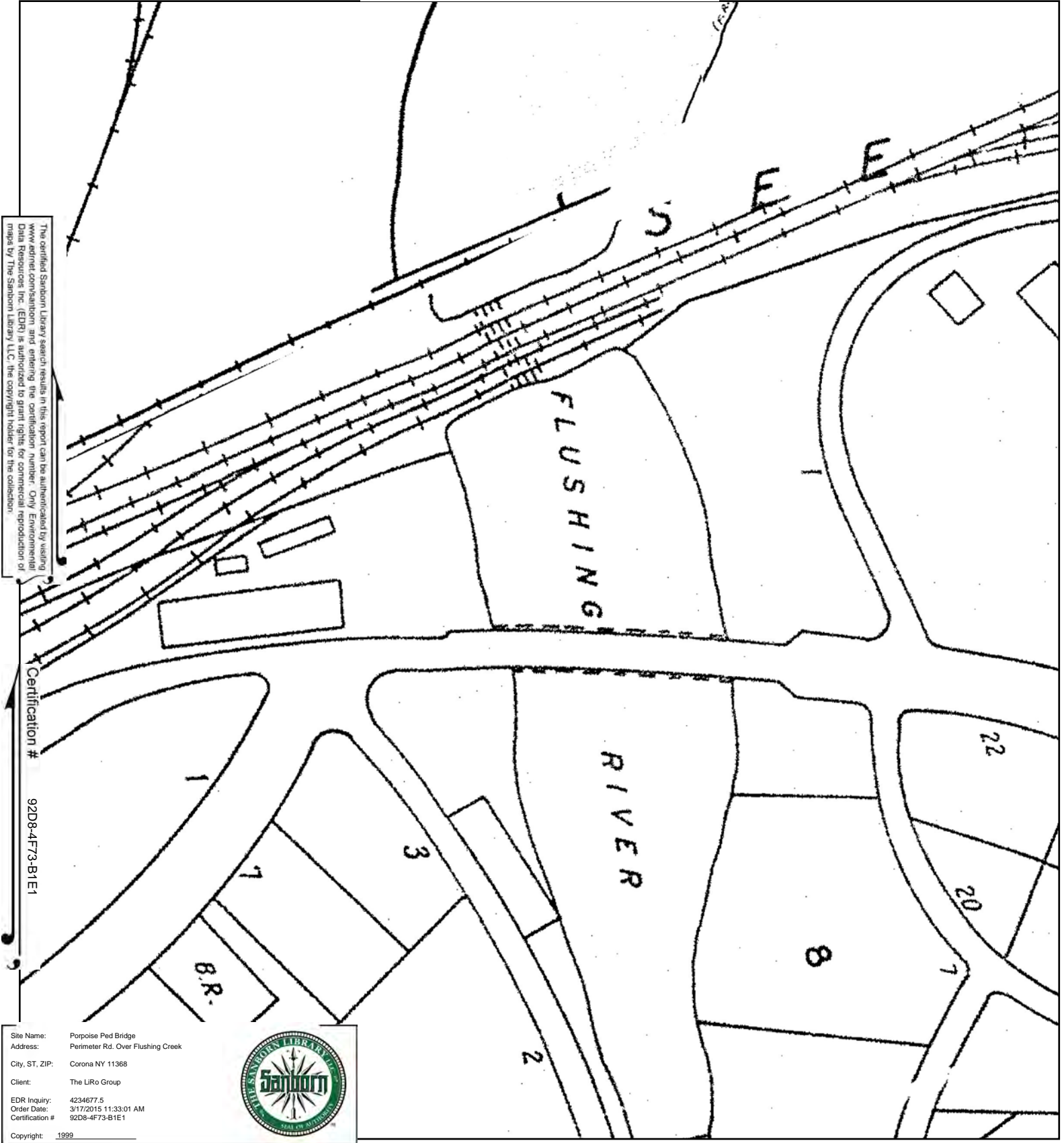
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Volume 19, Sheet 23
 Volume 19, Sheet 24
 Volume 11, Sheet 9



1999 Certified Sanborn Map



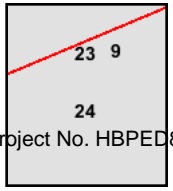
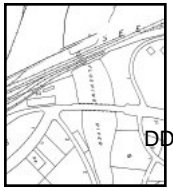
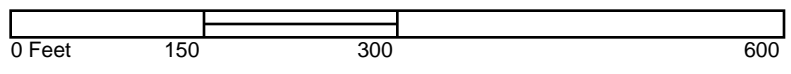
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Certification # 92D8-4F73-B1E1

Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1



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- Volume 11, Sheet 9
- Volume 19, Sheet 23
- Volume 19, Sheet 24

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HAZ. - 60

Version Date: May 16, 2022
 4234677 - 5 page 15



1995 Certified Sanborn Map

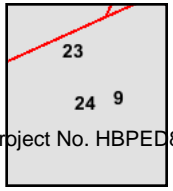
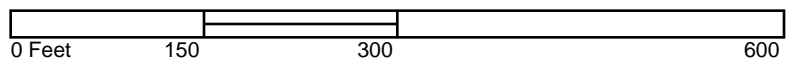
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Certification # 92D8-4F73-B1E1

Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
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- Volume 19, Sheet 23
- Volume 19, Sheet 24
- Volume 19, Sheet 23
- Volume 19, Sheet 24
- Volume 11, Sheet 9

DDC Project No. HBPED800Q

HAZ. - 61

Version Date: May 16, 2022
 4234677 - 5 page 16

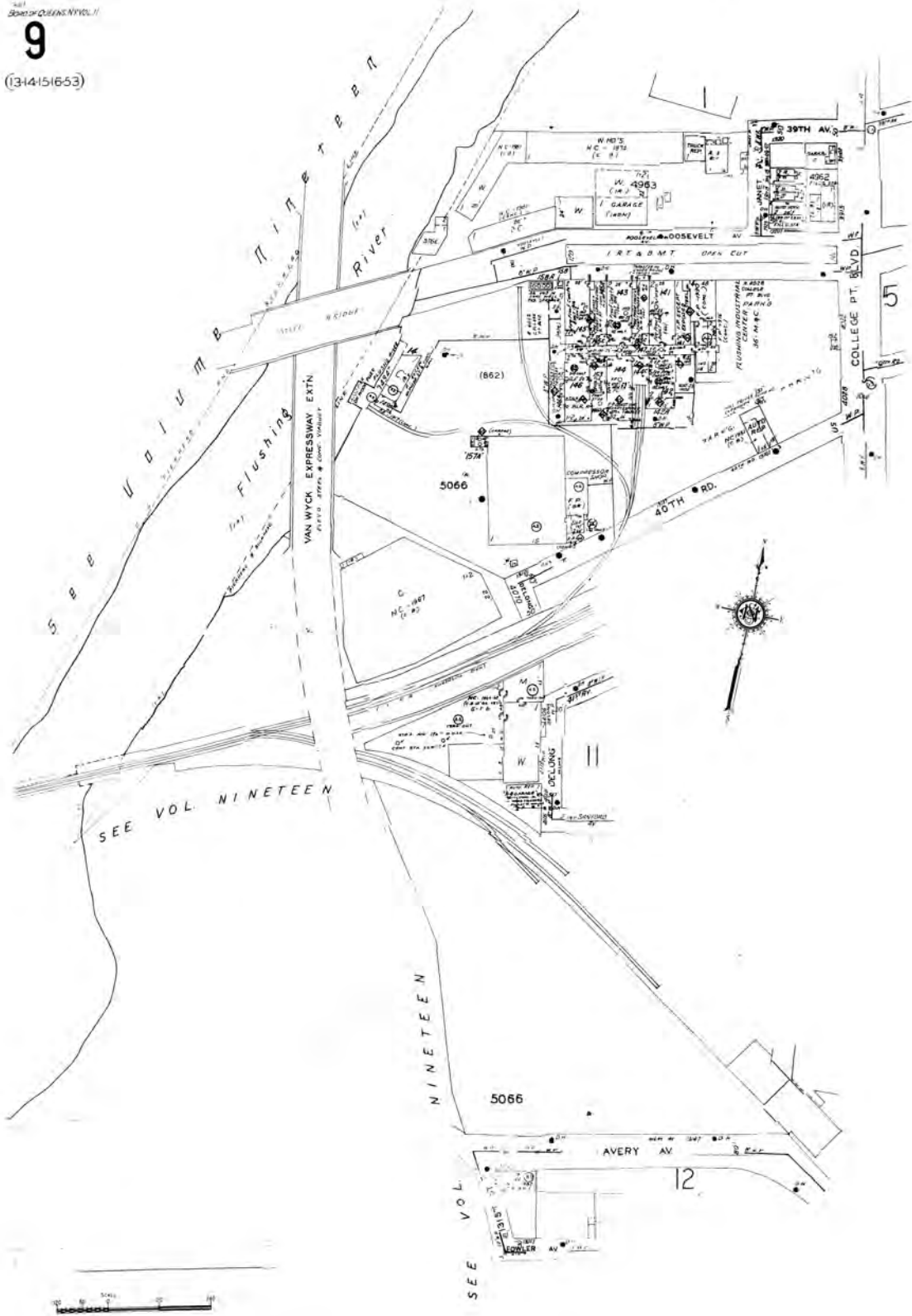


1994 Certified Sanborn Map

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(314151653)

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Certification # 92D8-4F73-B1E1



Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:30 AM
 Certification # 92D8-4F73-B1E1
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 HAZ. - 62

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 4234677 - 5 page 17

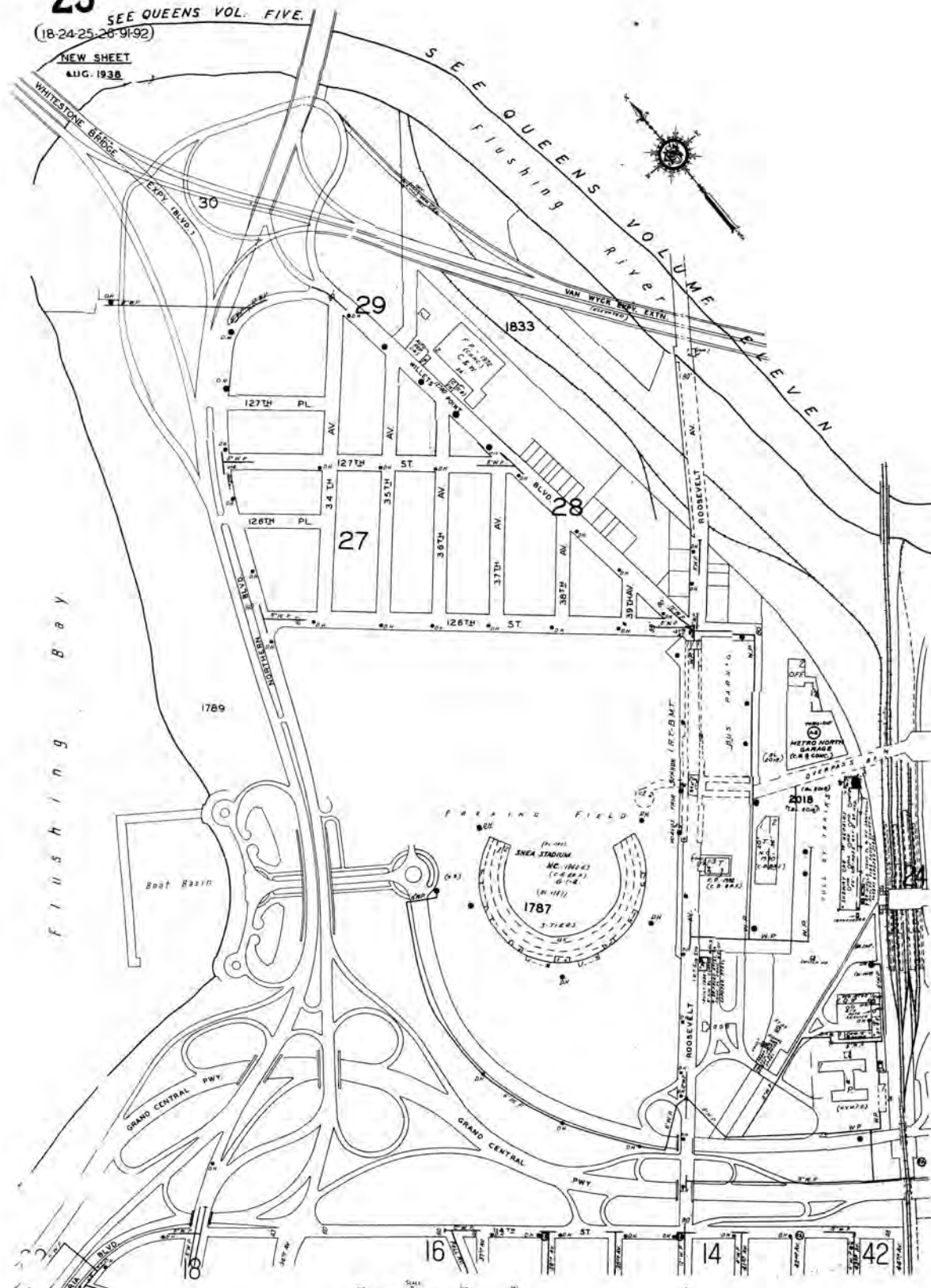
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BOARD OF QUEENS, N.Y. Vol. B

23

SEE QUEENS VOL. FIVE.
(18-24-25-26-91-92)

NEW SHEET
AUG. 1938



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Site Name: Porpoise Ped Bridge
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HAZ - 63

Version Date: May 16, 2022
4234677 - 5 page 18

1994 Certified Sanborn Map

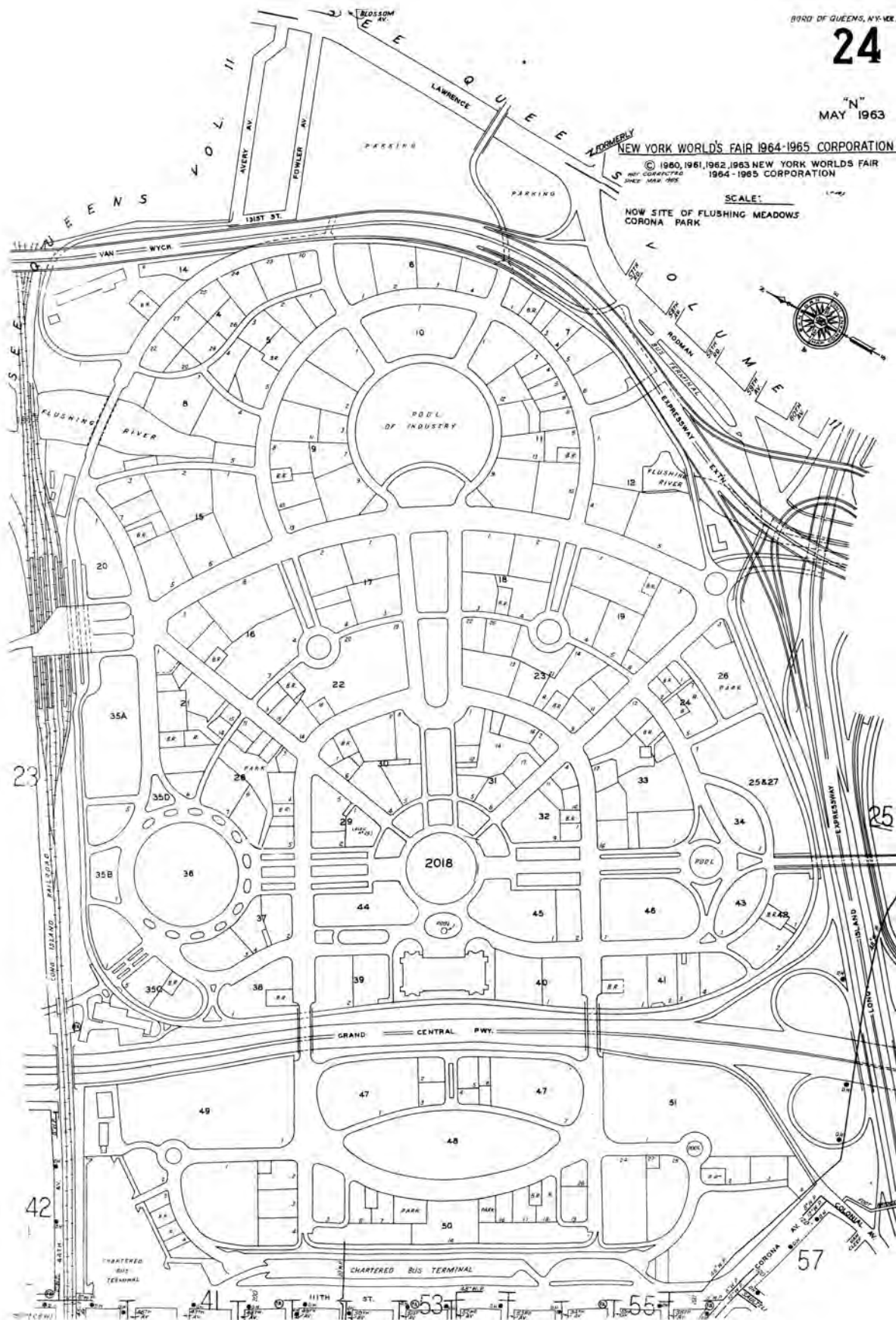
BIRD OF QUEENS, N.Y. - 1863

24

MAY 1963

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1964 - 1965 CORPORATION

SCALE:
NOW SITE OF FLUSHING MEADOWS
CORONA PARK



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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LIRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:11:00 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1994



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 HAZ - 64

Version Date: May 16, 2022
 4234677 - 5 page 19

1993 Certified Sanborn Map



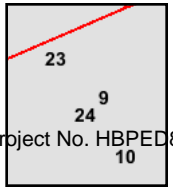
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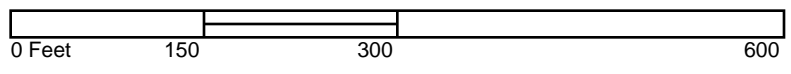
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 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1993



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- Volume 19, Sheet 23
- Volume 19, Sheet 24
- Volume 11, Sheet 9
- Volume 11, Sheet 10



1992 Certified Sanborn Map

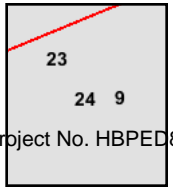


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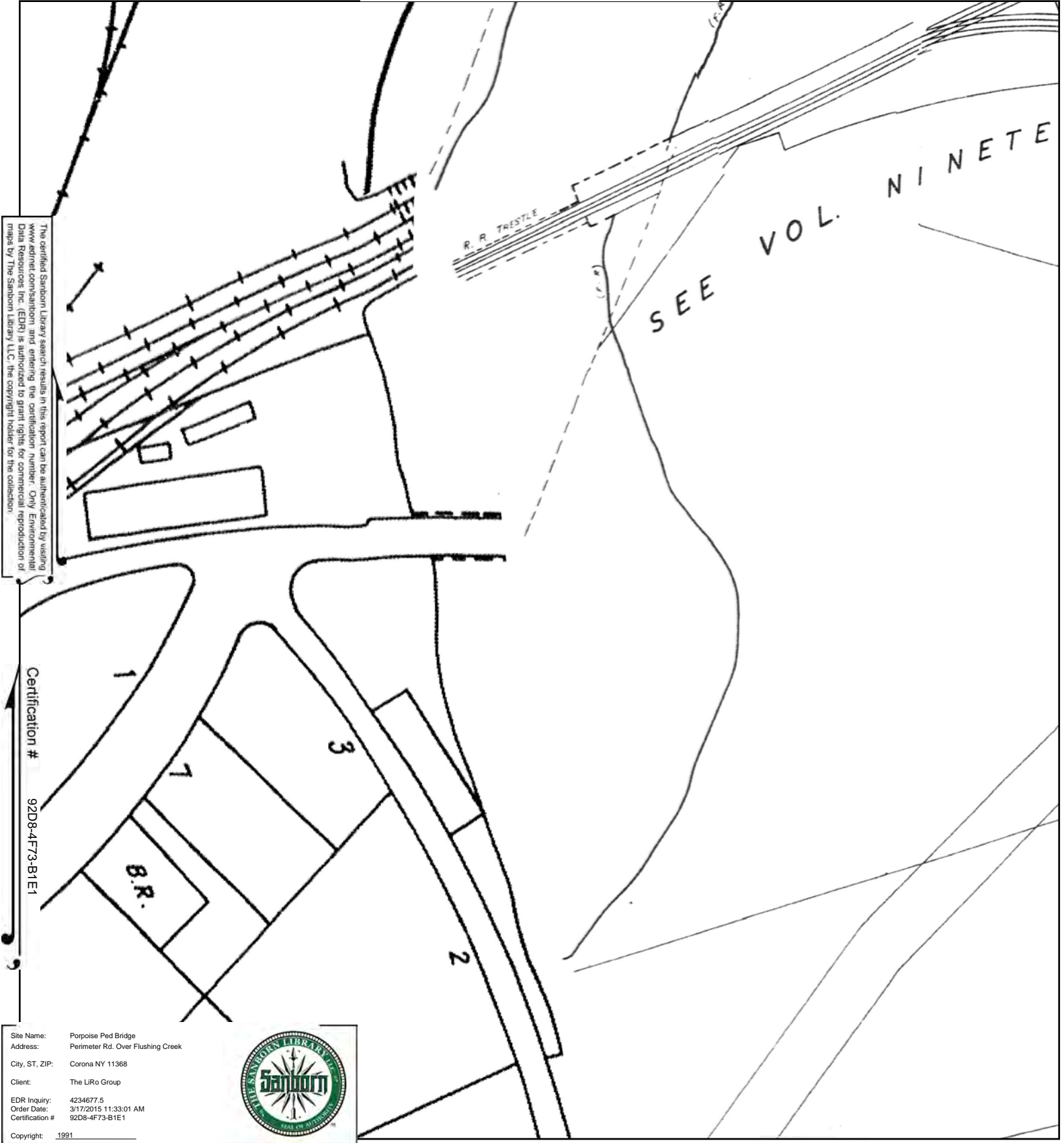
- Volume 11, Sheet 9
- Volume 19, Sheet 23
- Volume 19, Sheet 24

DDC Project No. HBPED800Q

HAZ. - 66

Version Date: May 16, 2022
 4234677 - 5 page 21

1991 Certified Sanborn Map



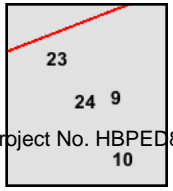
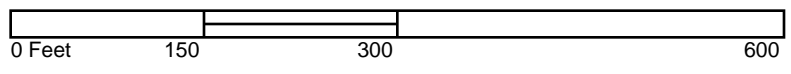
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
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 Certification #: 92D8-4F73-B1E1
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- Volume 19, Sheet 23
- Volume 19, Sheet 24
- Volume 11, Sheet 9
- Volume 11, Sheet 10

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HAZ. - 67

Version Date: May 16, 2022
 4234677 - 5 page 22



1989 Certified Sanborn Map



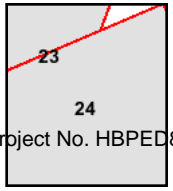
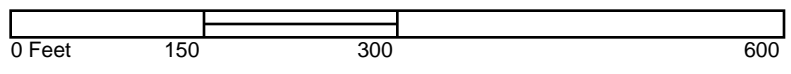
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1989



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Volume 19, Sheet 23
 Volume 19, Sheet 24

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HAZ. - 68

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 4234677 - 5 page 23



1988 Certified Sanborn Map

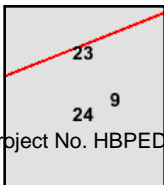
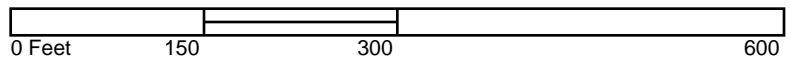


Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1



Copyright: 1988

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Volume 19, Sheet 23
 Volume 19, Sheet 24
 Volume 11, Sheet 9

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HAZ. - 69

Version Date: May 16, 2022
 4234677 - 5 page 24



1986 Certified Sanborn Map

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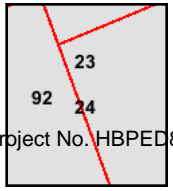
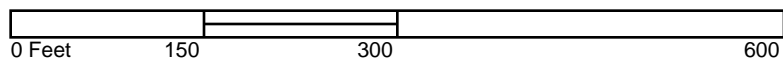
Certification # 92D8-4F73-B1E1

Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
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 Certification #: 92D8-4F73-B1E1



Copyright: 1986

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- Volume 19, Sheet 23
- Volume 19, Sheet 24
- Volume 19, Sheet 92

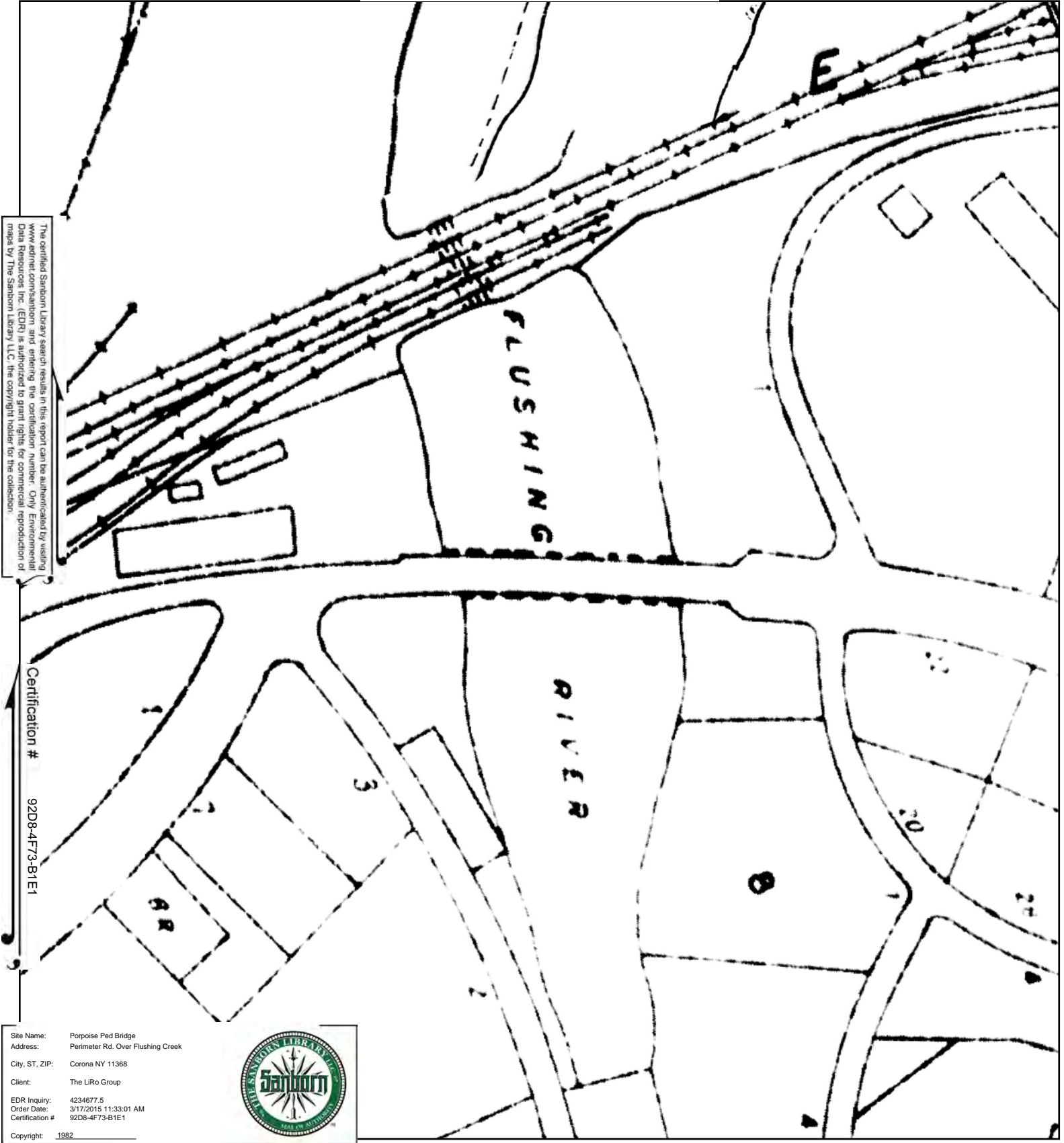
DDC Project No. HBPED800Q

HAZ. - 70

Version Date: May 16, 2022
 4234677 - 5 page 25



1982 Certified Sanborn Map



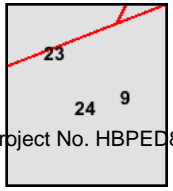
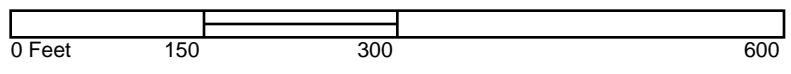
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1982



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- Volume 11, Sheet 9
- Volume 19, Sheet 23
- Volume 19, Sheet 24

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HAZ. - 71

Version Date: May 16, 2022
 4234677 - 5 page 26

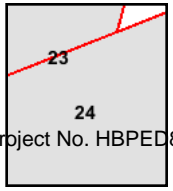


1981 Certified Sanborn Map



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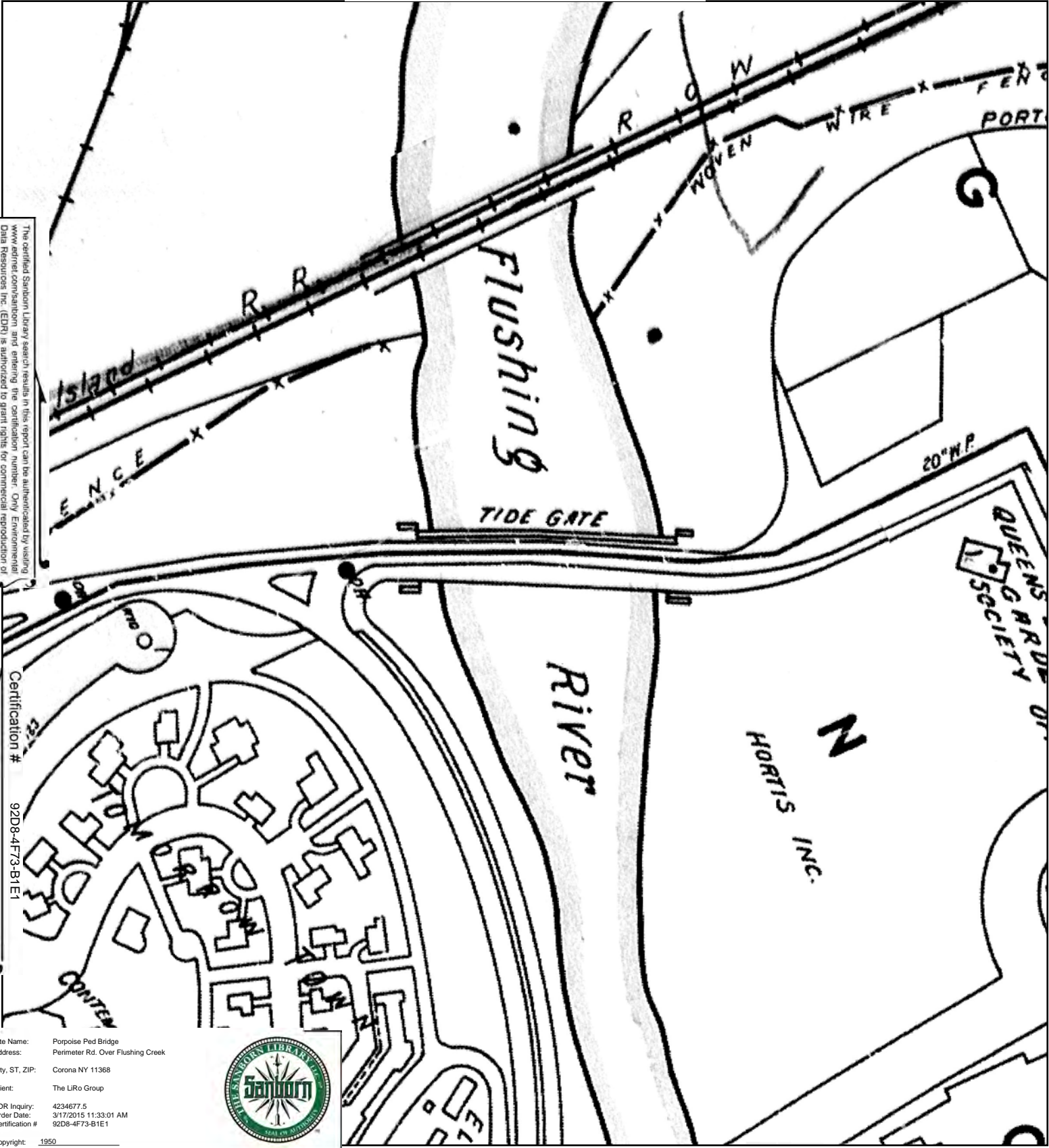
Volume 19, Sheet 23
Volume 19, Sheet 24

DDC Project No. HBPED800Q

HAZ. - 72

Version Date: May 16, 2022
4234677 - 5 page 27

1950 Certified Sanborn Map



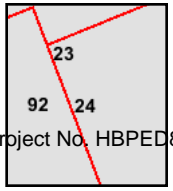
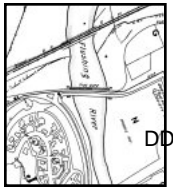
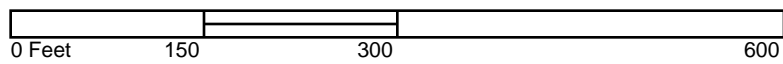
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1950



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- Volume 19, Sheet 23
- Volume 19, Sheet 24
- Volume 19, Sheet 92

DDC Project No. HBPED800Q

HAZ. - 73

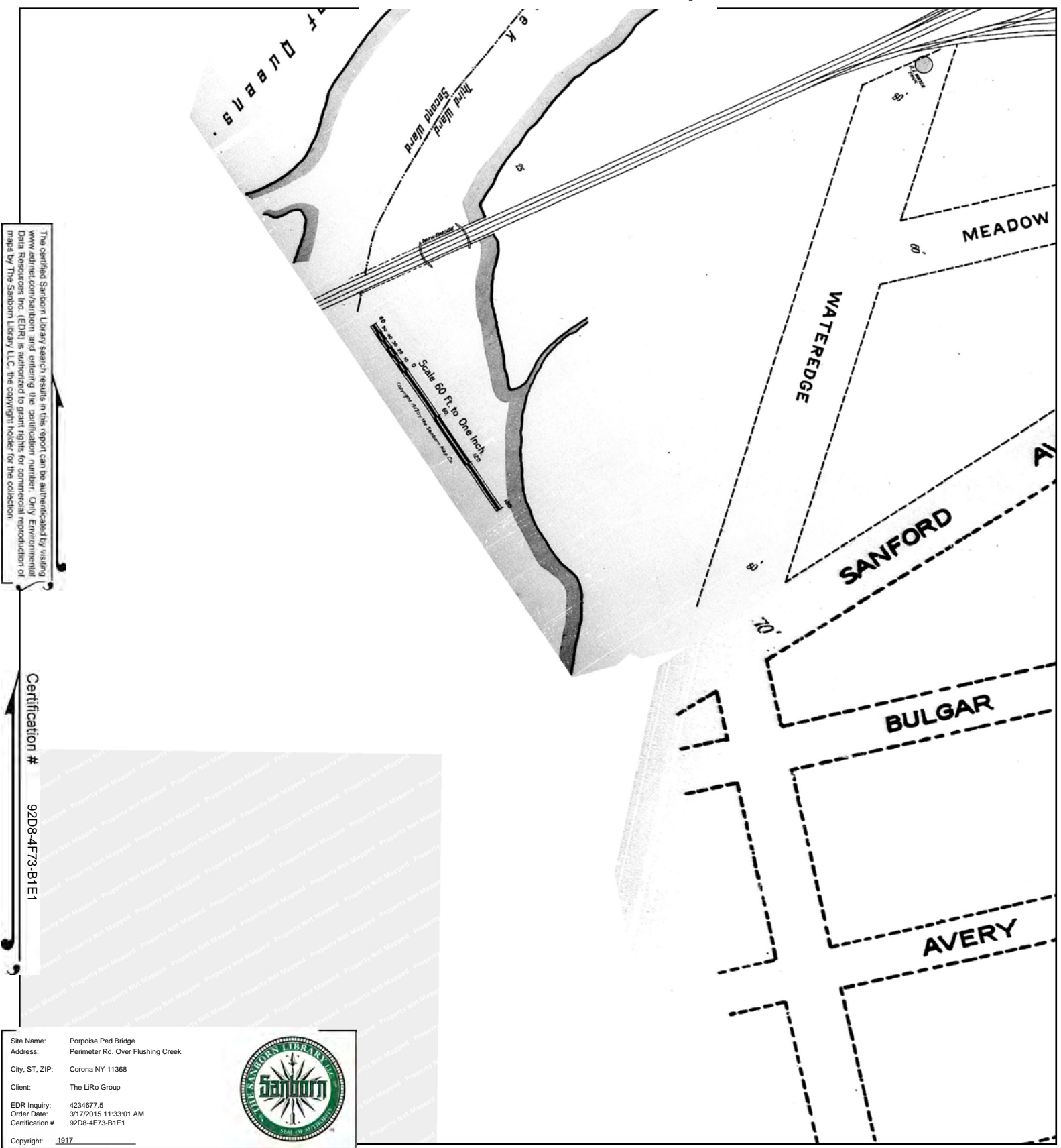
Version Date: May 16, 2022
 4234677 - 5 page 28



1917 Certified Sanborn Map

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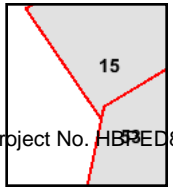
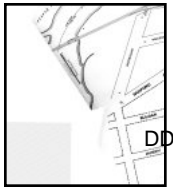
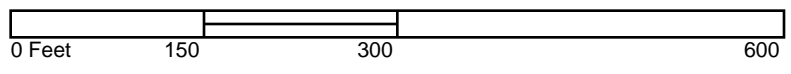
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LiRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
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Volume 11, Sheet 15
 Volume 11, Sheet 53

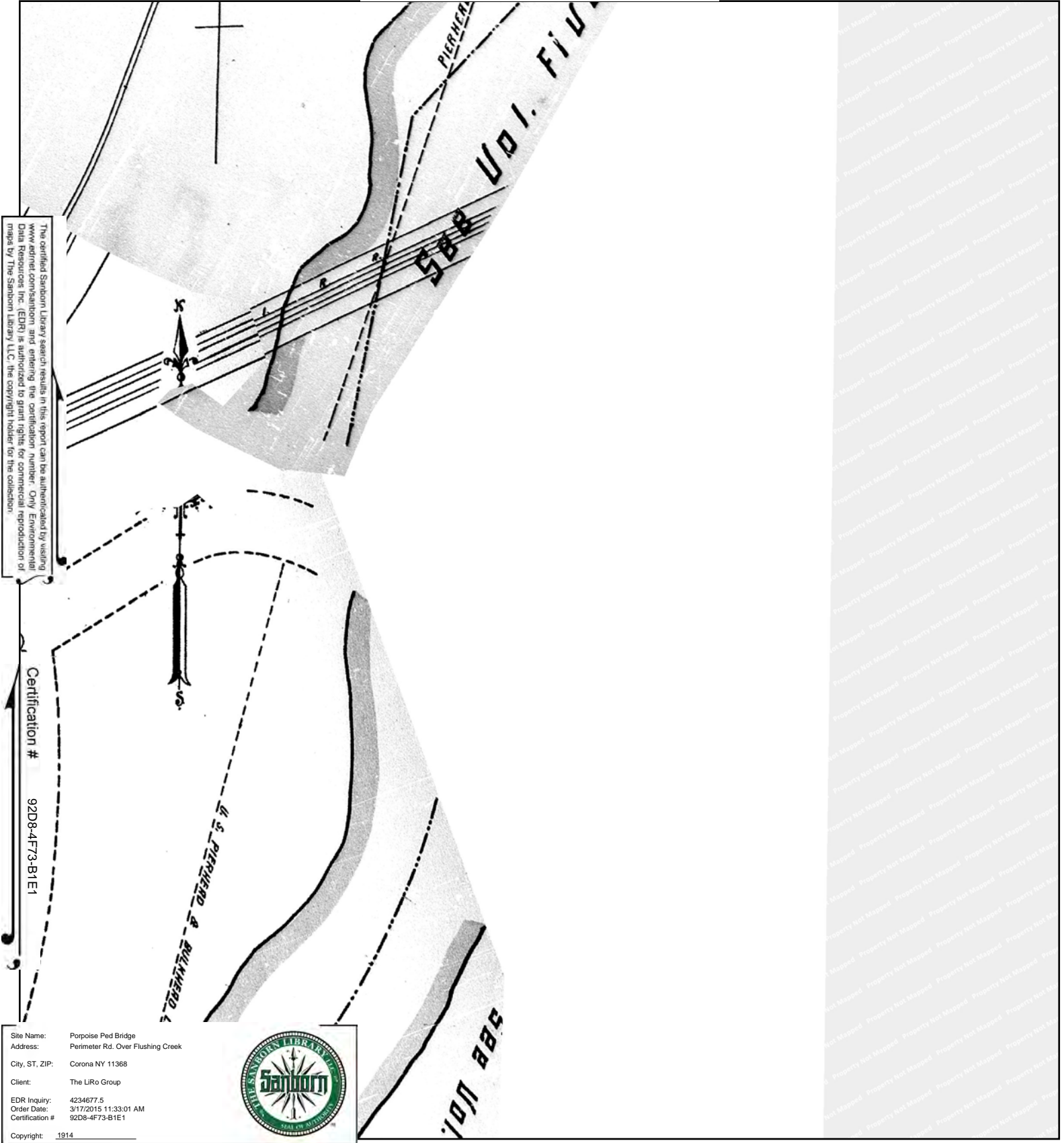
DDC Project No. HBPED800Q

HAZ. - 74

Version Date: May 16, 2022
 4234677 - 5 page 29



1914 Certified Sanborn Map



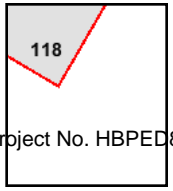
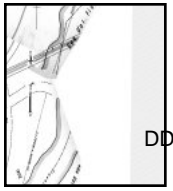
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1
 Copyright: 1914



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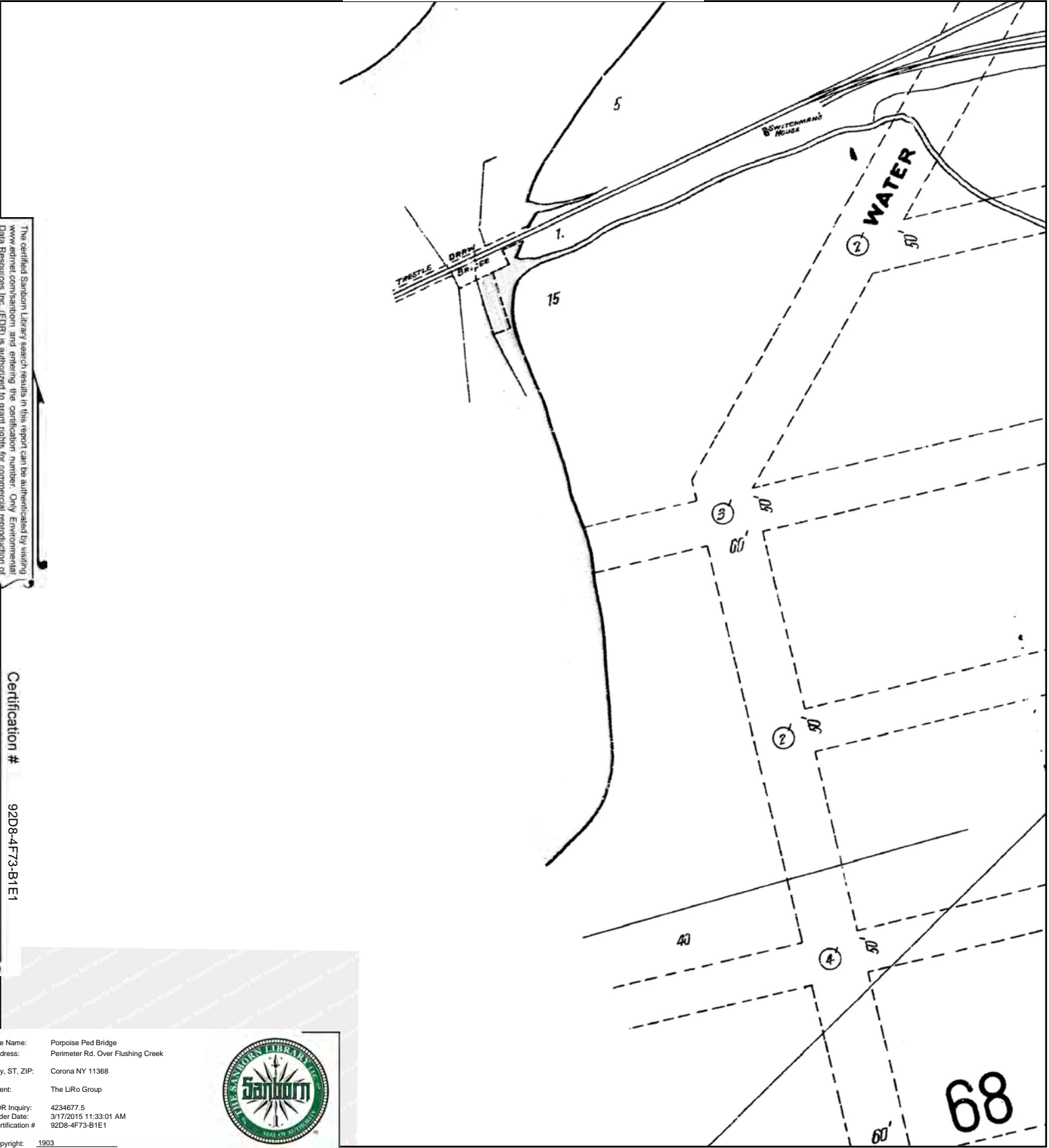
Volume 10, Sheet 118

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HAZ. - 75

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 4234677 - 5 page 30

1903 Certified Sanborn Map



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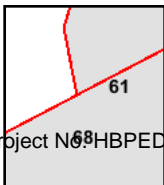
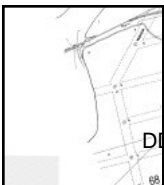
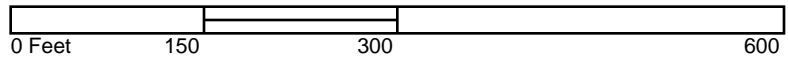
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Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification #: 92D8-4F73-B1E1



Copyright: 1903

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Volume 5, Sheet 61
 Volume 5, Sheet 68

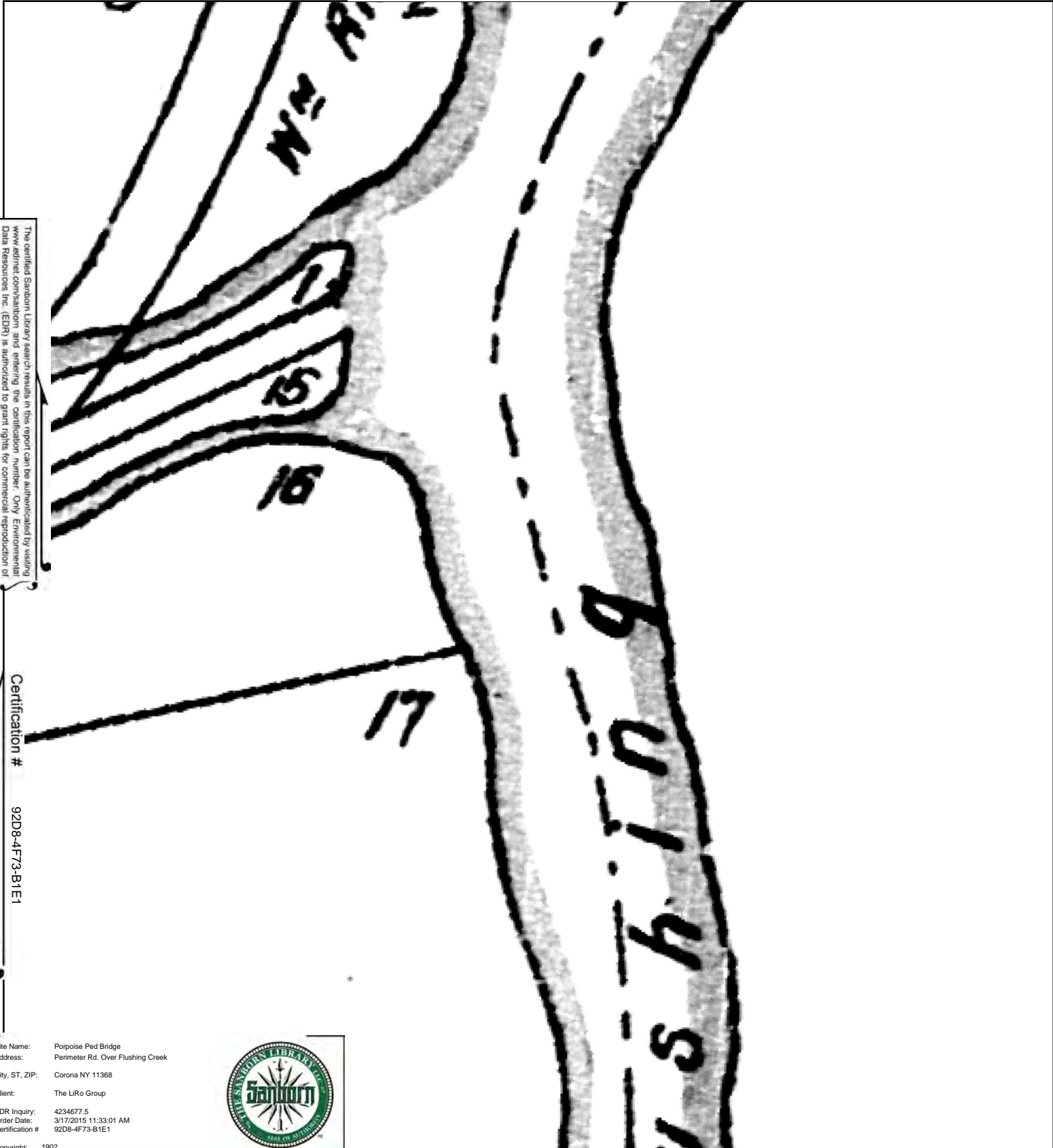
DDC Project N68HPBED800Q

HAZ. - 76

Version Date: May 16, 2022
 4234677 - 5 page 31



1902 Certified Sanborn Map



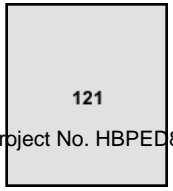
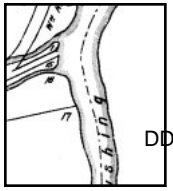
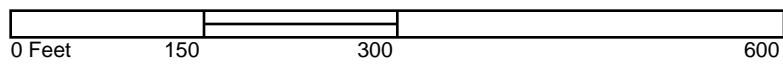
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Certification # 92D8-4F73-B1E1

Site Name: Porpoise Ped Bridge
 Address: Perimeter Rd. Over Flushing Creek
 City, ST, ZIP: Corona NY 11368
 Client: The LRo Group
 EDR Inquiry: 4234677.5
 Order Date: 3/17/2015 11:33:01 AM
 Certification # 92D8-4F73-B1E1
 Copyright: 1902



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Volume 3, Sheet 121

DDC Project No. HBPED800Q

HAZ. - 77

Version Date: May 16, 2022
 4234677 - 5 page 32





APPENDIX C
REGULATORY AGENCY DATABASE REPORT
Included on Attached CD

Porpoise Ped Bridge

Perimeter Rd. Over Flushing Creek

Corona, NY 11368

Inquiry Number: 4234677.2s

March 16, 2015

The EDR Radius Map™ Report

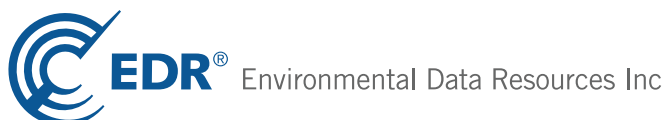


TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	332
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

PERIMETER RD. OVER FLUSHING CREEK
QUEENS County, NY 11368

COORDINATES

Latitude (North): 40.7527000 - 40° 45' 9.72"
Longitude (West): 73.8401000 - 73° 50' 24.36"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 597916.7
UTM Y (Meters): 4511740.5
Elevation: 7 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 40073-G7 FLUSHING, NY
Most Recent Revision: 1995

South Map: 40073-F7 JAMAICA, NY
Most Recent Revision: 1994

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20110710
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

NY SHWS..... Inactive Hazardous Waste Disposal Sites in New York State
NY VAPOR REOPENED..... Vapor Intrusion Legacy Site List

State and tribal leaking storage tank lists

NY HIST LTANKS..... Listing of Leaking Storage Tanks
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

NY CBS UST..... Chemical Bulk Storage Database
NY MOSF UST..... Major Oil Storage Facilities Database
NY MOSF AST..... Major Oil Storage Facilities Database
NY MOSF..... Major Oil Storage Facility Site Listing
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

EXECUTIVE SUMMARY

State and tribal institutional control / engineering control registries

NY ENG CONTROLS..... Registry of Engineering Controls
NY INST CONTROL..... Registry of Institutional Controls
NY RES DECL..... Restrictive Declarations Listing

State and tribal voluntary cleanup sites

NY VCP..... Voluntary Cleanup Agreements
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NY ERP..... Environmental Restoration Program Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
NY SWRCY..... Registered Recycling Facility List
NY SWTIRE..... Registered Waste Tire Storage & Facility List
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
NY DEL SHWS..... Delisted Registry Sites
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
NY LIENS..... Spill Liens Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
NY Hist Spills..... SPILLS Database
NY SPILLS 90..... SPILLS 90 data from FirstSearch
NY SPILLS 80..... SPILLS 80 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees

EXECUTIVE SUMMARY

ROD.....	Records Of Decision
UMTRA.....	Uranium Mill Tailings Sites
US MINES.....	Mines Master Index File
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System
PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
NY HSWDS.....	Hazardous Substance Waste Disposal Site Inventory
NY UIC.....	Underground Injection Control Wells
NY DRYCLEANERS.....	Registered Drycleaners
NY SPDES.....	State Pollutant Discharge Elimination System
NY AIRS.....	Air Emissions Data
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
NY Financial Assurance.....	Financial Assurance Information Listing
NY COAL ASH.....	Coal Ash Disposal Site Listing
LEAD SMELTERS.....	Lead Smelter Sites
PCB TRANSFORMER.....	PCB Transformer Registration Database
2020 COR ACTION.....	2020 Corrective Action Program List
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA LF.....	Recovered Government Archive Solid Waste Facilities List
NY RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SPECTRUM MAINTENANCE CORP	39-08 JANET PLACE	NNE 1/4 - 1/2 (0.413 mi.)	Q90	283

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MTA NYCT - WILLETS POINT SHEA	ROOSEVELT AVE & 126TH S	NW 1/8 - 1/4 (0.190 mi.)	A7	23

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KONICA PHOTO IMAGING	123-01 ROOSEVELT AVE	WNW 1/8 - 1/4 (0.239 mi.)	H40	134
KEPCO INC	131-38 SANFORD AVE	ENE 1/8 - 1/4 (0.246 mi.)	F62	179

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the NY SWF/LF list, as provided by EDR, and dated 01/06/2015 has revealed that there are 28 NY SWF/LF sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
STOP 4 AUTO PARTS INC	53-30 97TH PLACE	NW 1/8 - 1/4 (0.185 mi.)	D4	21
ACDC SCRAP METAL INC.	12630 WILLETS POINT BLV	NNW 1/8 - 1/4 (0.244 mi.)	I53	152
ACDC SCRAP METAL INC	126-30 WILLETS POINT BL	NNW 1/8 - 1/4 (0.245 mi.)	I59	169
WILLETS PT AUTO SALVAGE, INC.	126-55 WILLETS PT. BLVD	NNW 1/4 - 1/2 (0.282 mi.)	K66	203
JACOB TIRE	126-58 WILLETS POINT BL	NNW 1/4 - 1/2 (0.284 mi.)	K67	204
ROYAL USED CARS	38-15A 126TH STREET	NW 1/4 - 1/2 (0.297 mi.)	L68	204
ROYAL USED CARS INC.	3815 126TH STREET	NW 1/4 - 1/2 (0.298 mi.)	L69	205
ARIAS AUTO REPAIR	126-31 38TH AVENUE	NNW 1/4 - 1/2 (0.303 mi.)	K70	206
MANUEL AUTO REPAIR	38-05 126TH STREET	NW 1/4 - 1/2 (0.304 mi.)	L71	207
NEW SPOTLESS M & G SHOP	126-75 WILLETS POINT BL	NNW 1/4 - 1/2 (0.314 mi.)	K72	209
ET AUTO PARTS INC	126-93 WILLETS POINT BL	NNW 1/4 - 1/2 (0.347 mi.)	N75	221
EXPRESS USED AUTO PARTS INC	126-16 37TH AVE	NNW 1/4 - 1/2 (0.364 mi.)	76	228
BCA AUTO PARTS INC	126-43 37TH AVE	NNW 1/4 - 1/2 (0.366 mi.)	N77	228
GERMAN DIAZ AUTO REPAIR	126-53 37TH AVE	NNW 1/4 - 1/2 (0.367 mi.)	N78	229
PANAJOTIS AUTO BODY SHOP	127-11 WILLETS POINT BL	NNW 1/4 - 1/2 (0.374 mi.)	N80	231
A & D USED AUTO PARTS & CARS I	12711 WILLETS POINT BLV	NNW 1/4 - 1/2 (0.374 mi.)	N81	237
TURBO AUTO SALES INC	127-18 WILLETS POINT BL	NNW 1/4 - 1/2 (0.380 mi.)	N83	239
H & S REPAIR CORP	127-27 WILLETS POINT BL	N 1/4 - 1/2 (0.395 mi.)	P86	253
LINCOLN USED AUTO PARTS & CARS	12732 WILLETS POINT BLV	N 1/4 - 1/2 (0.399 mi.)	P87	254
EIGHTEEN AUTO PARTS INC	127-40 WILLETS POINT BL	N 1/4 - 1/2 (0.411 mi.)	P88	255
DNZ AUTO PARTS & AUTO SALES IN	127-54 WILLETS POINT BL	N 1/4 - 1/2 (0.428 mi.)	P92	293
BOULEVARD AUTO WRECKING INC	127-60 WILLETS POINT BL	N 1/4 - 1/2 (0.437 mi.)	P93	295
CHEAPY STATION INC	127-61 WILLETS POINT BL	N 1/4 - 1/2 (0.442 mi.)	S95	304
SEMCO SALVAGE INC. DBA//ROOSEV	127-43 WILLETS POINT BL	N 1/4 - 1/2 (0.451 mi.)	S96	306
NEW BROTHER AUTO BODY SHOP	127-76 WILLETS POINT BL	N 1/4 - 1/2 (0.458 mi.)	S97	307
ASOCIADO AUTO PARTS INC	126-02 35TH AV	NNW 1/4 - 1/2 (0.461 mi.)	T98	308
FLUSHING TOWING	126-28 35TH AVE	NNW 1/4 - 1/2 (0.461 mi.)	T99	311
TRADING USED AUTO PARTS CORP	127-02 35TH AVE	NNW 1/4 - 1/2 (0.463 mi.)	T101	318

State and tribal leaking storage tank lists

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 02/16/2015 has revealed that there are 19 NY LTANKS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CASEY STANGEL (FLUSHING) BUS D Spill Number/Closed Date: 0013274 / 4/12/2004	123-53 WILLETS POINT BL	NW 1/8 - 1/4 (0.142 mi.)	A1	8
UNK Spill Number/Closed Date: 8710088 / 3/13/2003	41-06 DELONG ST	ENE 1/8 - 1/4 (0.182 mi.)	C3	19

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CASEY STENGEL DEPOT Spill Number/Closed Date: 9309299 / 1/24/2003	123-53 WILLET PT. RD	NW 1/8 - 1/4 (0.206 mi.)	D12	49
131-33 AVERY AVE/QUEENS Spill Number/Closed Date: 8908808 / 1/25/2013	131-33 AVERY AVENUE	E 1/8 - 1/4 (0.222 mi.)	21	101
FLUSHING MEADOWS PARK Spill Number/Closed Date: 0807272 / 10/12/2010	123-30 ROOSEVELT AVE	WNW 1/8 - 1/4 (0.232 mi.)	H27	112
CASEY STENGEL DEPOT Spill Number/Closed Date: 0105382 / 10/25/2002	126-53 WILLETS POINT BL	NNW 1/4 - 1/2 (0.278 mi.)	K65	197
WESTERN BEEF Spill Number/Closed Date: 0209360 / 12/11/2003	44-44 COLLEGE PT BLVD	E 1/4 - 1/2 (0.333 mi.)	M73	217
AMOCO SERVICE STATION Spill Number/Closed Date: 0400063 / 12/12/2005	49-04 COLLEGE POINT BLV	E 1/4 - 1/2 (0.343 mi.)	M74	219
ASCOR SCRAP METAL INC. Spill Number/Closed Date: 9107763 / 10/22/1991	127-08 WILLETS PT BLVD	NNW 1/4 - 1/2 (0.369 mi.)	N79	230
FLUSHING MEADOW PARK Spill Number/Closed Date: 9515607 / 11/22/1996	OLMSTEAD CENTER	W 1/4 - 1/2 (0.379 mi.)	82	238
FLUSHING INDUSTRIAL PARK Spill Number/Closed Date: 0606870 / 10/2/2006	40-22 COLLEGE POINT BLV	NE 1/4 - 1/2 (0.388 mi.)	O84	246
132-40 SANFORD AVE Spill Number/Closed Date: 0301843 / 1/24/2006	132-40 SANFORD AVE	ENE 1/4 - 1/2 (0.390 mi.)	85	251
KOREAN MARKET Spill Number/Closed Date: 0405679 / 8/26/2004	39-08 JANET PLACE	NNE 1/4 - 1/2 (0.413 mi.)	Q89	263
BLAND HOUSES -NYCHA Spill Number/Closed Date: 9106685 / 1/19/2006 Spill Number/Closed Date: 9414958 / 2/15/1995 Spill Number/Closed Date: 9008753 / 4/25/1995 Spill Number/Closed Date: 9403446 / 11/29/2010	40-05 COLLEGE POINT BLV	NE 1/4 - 1/2 (0.420 mi.)	O91	285
MOBIL S/S Spill Number/Closed Date: 9103630 / 9/28/2005	133-11 ROOSEVELT AVE.	NE 1/4 - 1/2 (0.440 mi.)	R94	302
BP AMOCO STATION Spill Number/Closed Date: 9709624 / 12/21/2006	39-14 COLLEGE POINT BOU	NE 1/4 - 1/2 (0.463 mi.)	R100	313
133-01 SANFORD AVE/QUEENS Spill Number/Closed Date: 8708774 / 1/14/1988	133-01 SANFORD AVE	ENE 1/4 - 1/2 (0.465 mi.)	102	322
LOT 215,TAXBLOCK 1833 Spill Number/Closed Date: 9906470 / 11/17/1999	127-92 WILLETS POINT BL	N 1/4 - 1/2 (0.479 mi.)	S103	323
COLLEGE PT BLVD @ 57TH AV Spill Number/Closed Date: 8900716 / 4/24/1989	COLLEGE PT BLVD @ 57TH	SE 1/4 - 1/2 (0.492 mi.)	104	330

State and tribal registered storage tank lists

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, and dated 12/29/2014 has revealed that there are 5

EXECUTIVE SUMMARY

NY UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COMMODITIES ASSISTANCE CORP	131-02 40TH ROAD	NE 1/8 - 1/4 (0.172 mi.)	B2	15
131-05 FOWLER AVE	131-05 FOWLER AVENUE	ESE 1/8 - 1/4 (0.207 mi.)	E13	50
CASEY STENGEL BUS DEPOT	123-53 WILLETS POINT BO	NW 1/8 - 1/4 (0.214 mi.)	D19	76
CRYSTAL WINDOWS	131-40 MAPLE AVE	ENE 1/8 - 1/4 (0.223 mi.)	F22	105
SETTE JULIANO CONST.	39-09 126 ST	NW 1/8 - 1/4 (0.244 mi.)	I55	153

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, and dated 12/29/2014 has revealed that there are 10 NY AST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DRAGON AUTO CENTER INC.	131-19 SANFORD AVENUE	ENE 1/8 - 1/4 (0.211 mi.)	C16	71
TAP AUTO REPAIR INC.	125-58 WILLETS POINT BL	NW 1/8 - 1/4 (0.216 mi.)	D20	99
POWER PLUS INC.	131-29 SANFORD AVENUE	ENE 1/8 - 1/4 (0.230 mi.)	F25	110
TOP GEAR AUTO PERFORMANCE INC.	41-17 FULLER PLACE	ENE 1/8 - 1/4 (0.233 mi.)	G30	116
88 PACE AUTO	41-11 FULLER PLACE	ENE 1/8 - 1/4 (0.234 mi.)	G32	119
DACAR AUTO RADIATOR DISTRIBUTO	127-11-13 WILLETS POINT	NNW 1/8 - 1/4 (0.239 mi.)	I39	132
DAVES AUTO CORP.	131-20, 41 AVE	NE 1/8 - 1/4 (0.241 mi.)	J44	139
LATIN AMERICA AUTO REPAIR CORP	126-26 WILLETS POINT BO	NNW 1/8 - 1/4 (0.243 mi.)	I52	147
SUNRISE AUTO PARTS INC.	126-30 WILLETS POINT BO	NNW 1/8 - 1/4 (0.245 mi.)	I60	170
M.S. AUTO & TRUCK SERVICES INC	131-25 41ST AVENUE	NE 1/8 - 1/4 (0.246 mi.)	J61	177

NY CBS AST: Chemical Bulk Storage Database. Registration data collected as required by 6 NYCRR Part 596. It includes facilities storing hazardous substances listed in 6 NYCRR Part 597, in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size. Includes facilities registered (and closed) since effective date of CBS regulations (July 15, 1988) through the date request is processed.

A review of the NY CBS AST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 NY CBS AST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CASEY STANGEL (FLUSHING) BUS D	123-53 WILLETS POINT BL	NW 1/8 - 1/4 (0.142 mi.)	A1	8

NY CBS: These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

A review of the NY CBS list, as provided by EDR, and dated 12/29/2014 has revealed that there is 1 NY CBS site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CASEY STANGEL (FLUSHING) BUS D	123-53 WILLETS POINT BL	NW 1/8 - 1/4 (0.142 mi.)	A1	8

EXECUTIVE SUMMARY

State and tribal Brownfields sites

NY BROWNFIELDS: Brownfields Site List

A review of the NY BROWNFIELDS list, as provided by EDR, and dated 02/16/2015 has revealed that there is 1 NY BROWNFIELDS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WILLETS POINT DEVELOPMENT	126TH ST./WILLETS POINT	NW 1/8 - 1/4 (0.209 mi.)	D15	69

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

NY HIST UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY HIST UST list, as provided by EDR, and dated 01/01/2002 has revealed that there are 3 NY HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COMMODITIES ASSISTANCE CORP	131-02 40TH ROAD	NE 1/8 - 1/4 (0.172 mi.)	B2	15
N&A AUTO REP. INC D/B/A H&M AU	126-26 WILLETS POINT BL	NNW 1/8 - 1/4 (0.213 mi.)	D18	74
SETTE JULIANO CONST.	39-09 126 ST	NW 1/8 - 1/4 (0.244 mi.)	I55	153

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 7 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NYCTA-SUBSTATION 28	WILLETS POINT AND ROOSE	NW 1/8 - 1/4 (0.191 mi.)	A10	37
COMMODITIES ASSISTANCE CORP	40TH RD	NE 1/8 - 1/4 (0.198 mi.)	B11	46
NYCDEP FLUSHING BAY CS4-3	131-01 FOWLER AVE	ESE 1/8 - 1/4 (0.207 mi.)	E14	58
CON EDISION - VS#513	BI-10, MARTEL AVE BI-10	ENE 1/8 - 1/4 (0.223 mi.)	F23	107
USTA NATIONAL TENNIS CENTER IN	123-30 ROOSEVELT AVE	WNW 1/8 - 1/4 (0.232 mi.)	H28	113
G P IRON WORK INC	131-32 SANFORD AVE	ENE 1/8 - 1/4 (0.234 mi.)	F34	122
EXXON CO USA-CORONA	126-25 WILLETS POINT BL	NNW 1/8 - 1/4 (0.242 mi.)	I49	143

EXECUTIVE SUMMARY

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 01/01/2015 has revealed that there are 12 NY MANIFEST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>MTA NYCT - WILLETS POINT SHEA</i>	<i>ROOSEVELT AVE & 126TH S</i>	<i>NW 1/8 - 1/4 (0.190 mi.)</i>	<i>A7</i>	<i>23</i>
<i>NYCTA-SUBSTATION 28</i>	<i>WILLETS POINT AND ROOSE</i>	<i>NW 1/8 - 1/4 (0.191 mi.)</i>	<i>A10</i>	<i>37</i>
<i>COMMODITIES ASSISTANCE CORP</i>	<i>40TH RD</i>	<i>NE 1/8 - 1/4 (0.198 mi.)</i>	<i>B11</i>	<i>46</i>
<i>NYCDEP FLUSHING BAY CS4-3</i>	<i>131-01 FOWLER AVE</i>	<i>ESE 1/8 - 1/4 (0.207 mi.)</i>	<i>E14</i>	<i>58</i>
<i>CON EDISON - VS#513</i>	<i>BI-10, MARTEL AVE BI-10</i>	<i>ENE 1/8 - 1/4 (0.223 mi.)</i>	<i>F23</i>	<i>107</i>
CON EDISON	126-09 WILLETS POINT BL	NW 1/8 - 1/4 (0.227 mi.)	D24	109
<i>USTA NATIONAL TENNIS CENTER IN</i>	<i>123-30 ROOSEVELT AVE</i>	<i>WNW 1/8 - 1/4 (0.232 mi.)</i>	<i>H28</i>	<i>113</i>
NYCDEP	41-11 FULLER PLACE	ENE 1/8 - 1/4 (0.234 mi.)	G31	119
<i>G P IRON WORK INC</i>	<i>131-32 SANFORD AVE</i>	<i>ENE 1/8 - 1/4 (0.234 mi.)</i>	<i>F34</i>	<i>122</i>
<i>KONICA PHOTO IMAGING</i>	<i>123-01 ROOSEVELT AVE</i>	<i>WNW 1/8 - 1/4 (0.239 mi.)</i>	<i>H40</i>	<i>134</i>
<i>EXXON CO USA-CORONA</i>	<i>126-25 WILLETS POINT BL</i>	<i>NNW 1/8 - 1/4 (0.242 mi.)</i>	<i>I49</i>	<i>143</i>
<i>KEPCO INC</i>	<i>131-38 SANFORD AVE</i>	<i>ENE 1/8 - 1/4 (0.246 mi.)</i>	<i>F62</i>	<i>179</i>

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 01/01/2015 has revealed that there are 2 NJ MANIFEST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>MTA NYCT - WILLETS POINT SHEA</i>	<i>ROOSEVELT AVE & 126TH S</i>	<i>NW 1/8 - 1/4 (0.190 mi.)</i>	<i>A7</i>	<i>23</i>
<i>KEPCO INC</i>	<i>131-38 SANFORD AVE</i>	<i>ENE 1/8 - 1/4 (0.246 mi.)</i>	<i>F62</i>	<i>179</i>

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 27 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	12625 ROOSEVELT AVE	NNW 1/8 - 1/4 (0.186 mi.)	D5	22
Not reported	12602 ROOSEVELT AVE	NW 1/8 - 1/4 (0.188 mi.)	A6	23
Not reported	12601 ROOSEVELT AVE	NW 1/8 - 1/4 (0.191 mi.)	A8	36
Not reported	12601 ROOSEVELT AVE	NW 1/8 - 1/4 (0.191 mi.)	A9	37
Not reported	13119 SANFORD AVE	ENE 1/8 - 1/4 (0.212 mi.)	C17	73

EXECUTIVE SUMMARY

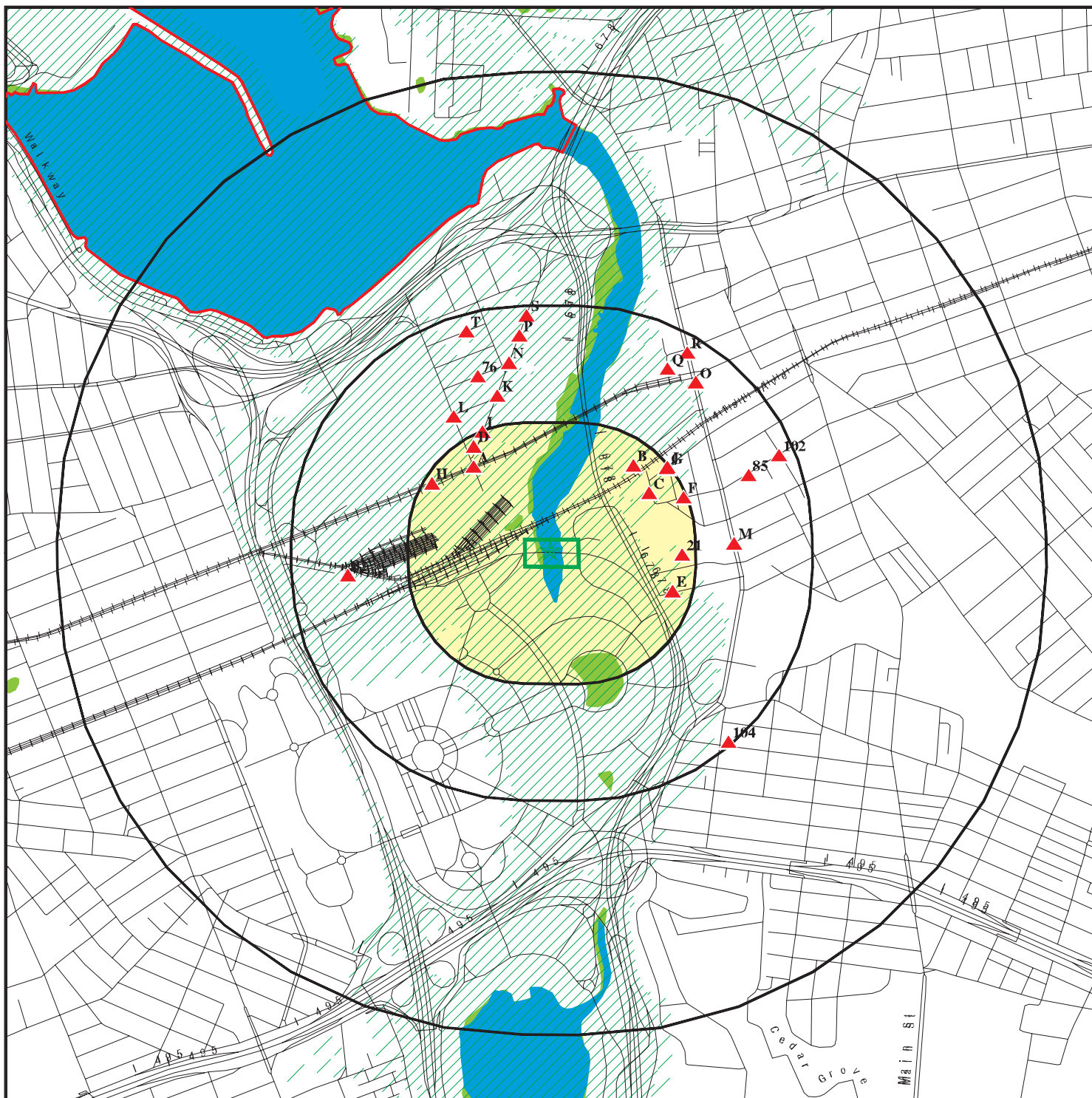
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	4147 FULLER PL	ENE 1/8 - 1/4 (0.232 mi.)	G26	112
Not reported	13129 SANFORD AVE	ENE 1/8 - 1/4 (0.232 mi.)	F29	116
Not reported	4117 FULLER PL	ENE 1/8 - 1/4 (0.234 mi.)	G33	121
Not reported	4113 FULLER PL	ENE 1/8 - 1/4 (0.235 mi.)	G35	130
Not reported	4111 FULLER PL	ENE 1/8 - 1/4 (0.235 mi.)	G36	131
Not reported	13132 SANFORD AVE	ENE 1/8 - 1/4 (0.235 mi.)	F37	132
Not reported	12601 WILLETS POINT BLV	NNW 1/8 - 1/4 (0.235 mi.)	I38	132
Not reported	12615 WILLETS POINT BL	NNW 1/8 - 1/4 (0.240 mi.)	I41	138
Not reported	12617 WILLETS POINT BL	NNW 1/8 - 1/4 (0.241 mi.)	I42	138
Not reported	12617 WILLETS POINT BL	NNW 1/8 - 1/4 (0.241 mi.)	I43	139
Not reported	12619 WILLETS POINT BL	NNW 1/8 - 1/4 (0.241 mi.)	I45	141
Not reported	12624 WILLETS POINT BL	NNW 1/8 - 1/4 (0.242 mi.)	I46	141
Not reported	13117 41ST AVE	NE 1/8 - 1/4 (0.242 mi.)	J47	142
Not reported	12626 WILLETS POINT BL	NNW 1/8 - 1/4 (0.242 mi.)	I48	143
Not reported	13135 SANFORD AVE	ENE 1/8 - 1/4 (0.243 mi.)	F50	145
Not reported	13120 41ST AVE	NE 1/8 - 1/4 (0.243 mi.)	G51	146
Not reported	12630 WILLETS POINT BL	NNW 1/8 - 1/4 (0.244 mi.)	I54	152
Not reported	3909 126TH ST	NW 1/8 - 1/4 (0.245 mi.)	I56	167
Not reported	3909 126TH ST	NW 1/8 - 1/4 (0.245 mi.)	I57	168
Not reported	13125 41ST AVE	NE 1/8 - 1/4 (0.245 mi.)	J58	168
Not reported	12633 WILLETS POINT BL	NNW 1/8 - 1/4 (0.248 mi.)	I63	196
Not reported	12633 WILLETS POINT BL	NNW 1/8 - 1/4 (0.248 mi.)	I64	196

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

<u>Site Name</u>	<u>Database(s)</u>
FLUSHING INDUSTRIAL PARK (WESTERN)	NY ENG CONTROLS, NY INST CONTROL, NY VCP, NY BROWNFIELDS
FORMER TIFFANYS STUDIOS 32ND AVENUE AND FARRINGTON STREET	NY SHWS, NY Spills NY SHWS

OVERVIEW MAP - 4234677.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

County Boundary

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

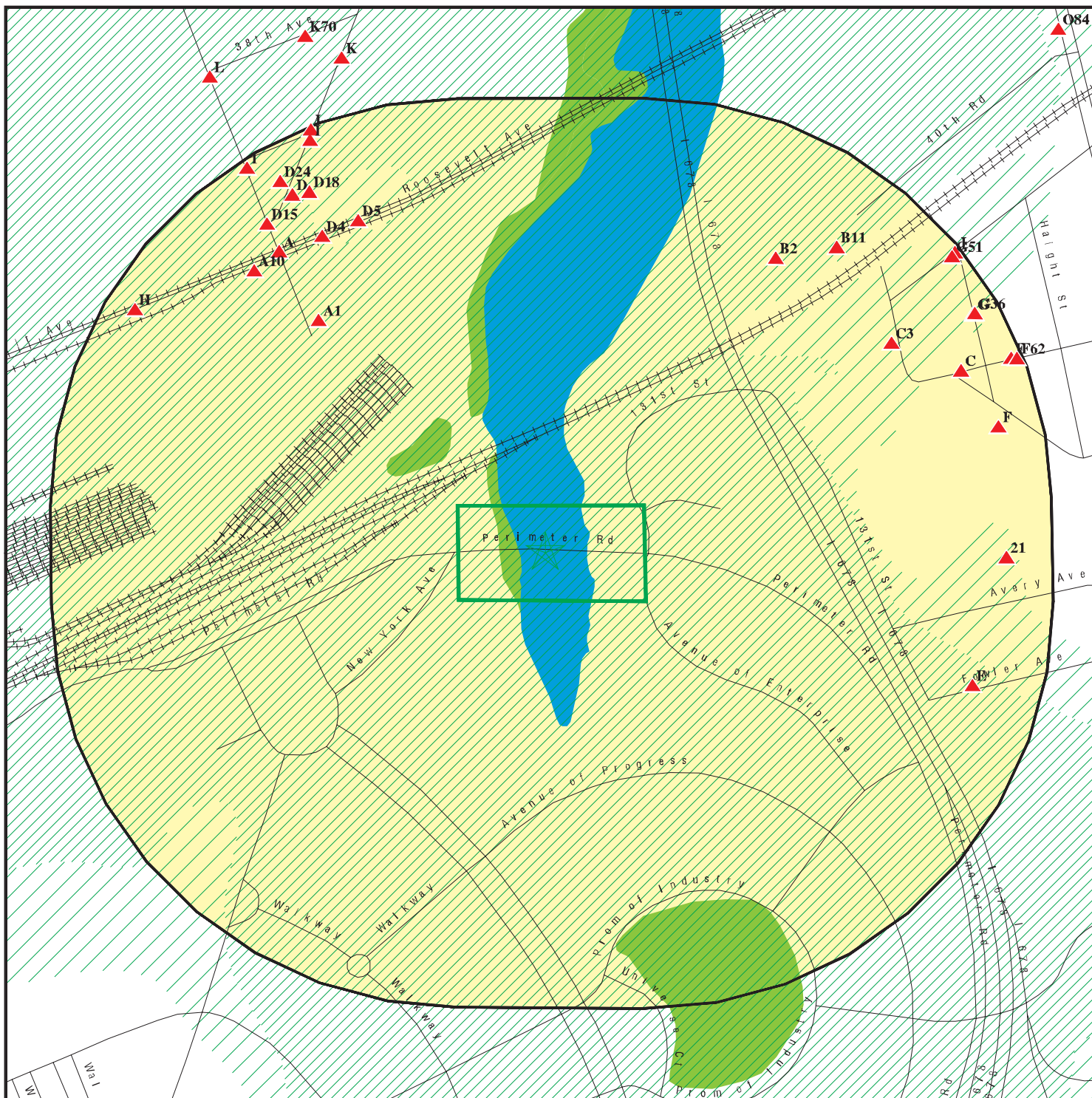
State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Porpoise Ped Bridge
 ADDRESS: Perimeter Rd. Over Flushing Creek
 D800001100E D800Q
 LAT/LONG: 40.7527 / 73.8401

CLIENT: The LiRo Group
 CONTACT: Amy Hewson
 INQUIRY #: 4234677.2s
 DATE: March 16, 2015 10:28 am
 Version Date: May 16, 2022

DETAIL MAP - 4234677.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

0 1/16 1/8 1/4 Miles



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Porpoise Ped Bridge
 ADDRESS: Perimeter Rd. Over Flushing Creek
 DDCoord: NAD 83 1808E D800Q
 LAT/LONG: 40.7527 / 73.8401

CLIENT: The LiRo Group
 CONTACT: Amy Hewson
 INQUIRY #: 4234677.2S
 DATE: March 16, 2015 10:29 am
 Version Date: May 16, 2022

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	1	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	2	NR	NR	NR	2
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
NY SHWS	1.000		0	0	0	0	NR	0
NY VAPOR REOPENED	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
NY SWF/LF	0.500		0	3	25	NR	NR	28
<i>State and tribal leaking storage tank lists</i>								
NY LTANKS	0.500		0	5	14	NR	NR	19
NY HIST LTANKS	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
NY TANKS	0.250		0	0	NR	NR	NR	0
NY UST	0.250		0	5	NR	NR	NR	5
NY CBS UST	0.250		0	0	NR	NR	NR	0
NY MOSF UST	0.500		0	0	0	NR	NR	0
NY AST	0.250		0	10	NR	NR	NR	10
NY CBS AST	0.250		0	1	NR	NR	NR	1
NY MOSF AST	0.500		0	0	0	NR	NR	0
NY CBS	0.250		0	1	NR	NR	NR	1
NY MOSF	0.500		0	0	0	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
NY ENG CONTROLS	0.500		0	0	0	NR	NR	0
NY INST CONTROL	0.500		0	0	0	NR	NR	0
NY RES DECL	0.125		0	NR	NR	NR	NR	0
State and tribal voluntary cleanup sites								
NY VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
NY ERP	0.500		0	0	0	NR	NR	0
NY BROWNFIELDS	0.500		0	1	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
NY SWRCY	0.500		0	0	0	NR	NR	0
NY SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
NY DEL SHWS	1.000		0	0	0	0	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
NY HIST UST	0.250		0	3	NR	NR	NR	3
NY HIST AST	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
NY LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
NY Spills	0.125		0	NR	NR	NR	NR	0
NY Hist Spills	0.125		0	NR	NR	NR	NR	0
NY SPILLS 90	0.125		0	NR	NR	NR	NR	0
NY SPILLS 80	0.125		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	7	NR	NR	NR	7
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
NY HSWDS	0.500		0	0	0	NR	NR	0
NY UIC	TP		NR	NR	NR	NR	NR	0
NY MANIFEST	0.250		0	12	NR	NR	NR	12
NJ MANIFEST	0.250		0	2	NR	NR	NR	2
NY DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NY SPDES	TP		NR	NR	NR	NR	NR	0
NY AIRS	TP		NR	NR	NR	NR	NR	0
NY E DESIGNATION	0.125		0	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
NY Financial Assurance	TP		NR	NR	NR	NR	NR	0
NY COAL ASH	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US AIRS	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	27	NR	NR	NR	27
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA LF	TP		NR	NR	NR	NR	NR	0
NY RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

EDR ID Number
 EPA ID Number

A1 NW 1/8-1/4 0.142 mi. 752 ft.	CASEY STANGEL (FLUSHING) BUS DEPOT 123-53 WILLETS POINT BLVD. FLUSHING, NY 11368 Site 1 of 6 in cluster A	NY LTANKS NY CBS AST NY Spills NY CBS	S104073309 N/A
--	--	--	---------------------------------

Relative:
Higher

LTANKS:

Actual:
9 ft.

Site ID: 251127
 Spill Number/Closed Date: 0013274 / 4/12/2004
 Spill Date: 2/28/2001
 Spill Cause: Tank Failure
 Spill Source: Commercial/Industrial
 Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

 Cleanup Ceased: Not reported
 Cleanup Meets Standard: False
 SWIS: 4101
 Investigator: MCTIBBE
 Referred To: Not reported
 Reported to Dept: 3/20/2001
 CID: 382
 Water Affected: Not reported
 Spill Notifier: Other
 Last Inspection: Not reported
 Recommended Penalty: False
 UST Involvement: True
 Remediation Phase: 0
 Date Entered In Computer: 3/20/2001
 Spill Record Last Update: 10/6/2005
 Spiller Name: Not reported
 Spiller Company: NYC TRANSIT AUTHORITY
 Spiller Address: 123-53 WILLET BLVD
 Spiller City,St,Zip: QUEENS, NY - 001
 Spiller County: 001
 Spiller Contact: LENNY
 Spiller Phone: (718) 851-3806
 Spiller Extention: Not reported
 DEC Region: 2
 DER Facility ID: 205818
 DEC Memo:

Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE" After several attempts, State Env. determined that the tank would not meet testing criteria. They called in the spill when I learned of the problem and required them to call in the spill. After Franklin Company replaced the manway gasket, the tank alone passed testing. The lines were tested separately and passed testing. After several requests for the results of a full system test from NYCT, it was finally performed by Franklin Company on 04/08/04 and passed. ECO served NYCT with summons for late notification after DEC learn of the test failures. Summons dismissed, without my knowledge, based on an incorrect interpretation of the regulations and misrepresentation of the facts by NYCT. These violations occurred prior to the effective date of Consent Order CO2-20000101-3341, therefore they were settled by that Order.

 UNABLE TO FIND THE CAUSE OF PRODUCT LEAK - CAUSED THE DELAY IN REPORTING - POSSIBLE LEAK FROM TOP OF PRIMARY TANK BUT NOT SHOWING ANY PRODUCT IN SECONDARY

Material:

Site ID: 251127

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

Operable Unit ID: 834756
Operable Unit: 01
Material ID: 539990
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 4000
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

CBS AST:

CBS Number: 2-000281
ICS Number: Not reported
PBS Number: 2-190268
MOSF Number: Not reported
SPDES Number: Not reported
Facility Status: IN SERVICE
Facility Type: F
Telephone: (212) 690-9602
Facility Town: NEW YORK CITY
Region: STATE
Expiration Date: 08/11/2003
Total Capacity of All Active Tanks(gal): 1550
Operator: NEW YORK CITY TRANSIT
Emergency Contact: HOWARD MATZA
Emergency Phone: (718) 243-4581
Owner Name: NEW YORK CITY TRANSIT
Owner Address: 370 JAY STREET ROOM 819
Owner City,St,Zip: BROOKLYN, NY 11201
Owner Telephone: (718) 243-4581
Owner Type: State Government
Owner Sub Type: None
Mail Name: NEW YORK CITY TRANSIT
Mail Contact Addr: 370 JAY STREET
Mail Contact Addr2: ROOM 819
Mail Contact Contact: JOSEPHINE BROWN
Mail Contact City,St,Zip: BROOKLYN, NY 11201
Mail Phone: (718) 243-4581

Tank Id: CBS-CSG-2
CAS Number: 107211
Federal ID: Not reported
Tank Status: In Service
Install Date: 07/91
Tank Closed: 02/98
Capacity (Gal): 1000
Chemical: Ethylene glycol
Tank Location: Indoors, Aboveground
Tank Type: Steel/carbon steel
Total Tanks: 2

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

Tank Secret: False
Tank Secondary Containment: None
Tank Error Status: No Missing Data
Date Entered: 08/10/1995
Certified Date: 06/14/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: None
External Protection: Painted/Asphalt Coating
Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: Painted/Asphalt Coating
Pipe Flag: Painted/Asphalt Coating
Leak Detection: None
Overfill Protection: High Level Alarm
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 6301
Lat/Long: Not reported
Is Updated: False
Renew Date: Not reported
Is It There: False
Delinquent: False
Date Expired: Not reported
Owner Mark: 1
Certificate Needs to be Printed: False
Fiscal Amt for Registration Fee Correct: True
Renewal Has Been Printed for Facility: True
Pre-Printed Renewal App Last Printed: 04/30/2001

Tank Id: CBS-CSG-1
CAS Number: 107211
Federal ID: Not reported
Tank Status: In Service
Install Date: 04/89
Tank Closed: 02/98
Capacity (Gal): 1000
Chemical: Ethylene glycol
Tank Location: Indoors, Aboveground
Tank Type: Steel/carbon steel
Total Tanks: 2
Tank Secret: False
Tank Secondary Containment: None
Tank Error Status: No Missing Data
Date Entered: 08/10/1995
Certified Date: 06/14/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: None
External Protection: Painted/Asphalt Coating
Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: Painted/Asphalt Coating
Pipe Flag: Painted/Asphalt Coating
Leak Detection: None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

Overfill Protection: High Level Alarm
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 6301
Lat/Long: Not reported
Is Updated: False
Renew Date: Not reported
Is It There: False
Delinquent: False
Date Expired: Not reported
Owner Mark: 1
Certificate Needs to be Printed: False
Fiscal Amt for Registration Fee Correct: True
Renewal Has Been Printed for Facility: True
Pre-Printed Renewal App Last Printed: 04/30/2001

Tank Id: CBS-CSG-5
CAS Number: 107211
Federal ID: Not reported
Tank Status: In Service
Install Date: 02/98
Tank Closed: Not reported
Capacity (Gal): 550
Chemical: Ethylene glycol
Tank Location: Indoors, Belowground
Tank Type: Steel/carbon steel
Total Tanks: 2
Tank Secret: False
Tank Secondary Containment: Vault
Tank Error Status: No Missing Data
Date Entered: 01/26/1998
Certified Date: 06/14/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: None
External Protection: Painted/Asphalt Coating
Pipe Location: Aboveground
Pipe Type: Galvanized Steel
Pipe Internal: None
Pipe External: Painted/Asphalt Coating
Pipe Flag: Painted/Asphalt Coating
Leak Detection: Interstitial Monitoring
Overfill Protection: 23
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 6301
Lat/Long: Not reported
Is Updated: False
Renew Date: Not reported
Is It There: False
Delinquent: False
Date Expired: Not reported
Owner Mark: 1
Certificate Needs to be Printed: False
Fiscal Amt for Registration Fee Correct: True

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

Renewal Has Been Printed for Facility: True
Pre-Printed Renewal App Last Printed: 04/30/2001

Tank Id: CBS-CSG-4
CAS Number: 107211
Federal ID: Not reported
Tank Status: In Service
Install Date: 02/98
Tank Closed: Not reported
Capacity (Gal): 1000
Chemical: Ethylene glycol
Tank Location: Indoors, Belowground
Tank Type: Steel/carbon steel
Total Tanks: 2
Tank Secret: False
Tank Secondary Containment: Vault
Tank Error Status: No Missing Data
Date Entered: 01/26/1998
Certified Date: 06/14/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: None
External Protection: Painted/Asphalt Coating
Pipe Location: Aboveground
Pipe Type: Galvanized Steel
Pipe Internal: None
Pipe External: Painted/Asphalt Coating
Pipe Flag: Painted/Asphalt Coating
Leak Detection: Interstitial Monitoring
Overfill Protection: 23
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 6301
Lat/Long: Not reported
Is Updated: False
Renew Date: Not reported
Is It There: False
Delinquent: False
Date Expired: Not reported
Owner Mark: 1
Certificate Needs to be Printed: False
Fiscal Amt for Registration Fee Correct: True
Renewal Has Been Printed for Facility: True
Pre-Printed Renewal App Last Printed: 04/30/2001

Tank Id: CBS-CSG-3
CAS Number: 107211
Federal ID: Not reported
Tank Status: In Service
Install Date: 00/89
Tank Closed: 11/99
Capacity (Gal): 275
Chemical: Ethylene glycol
Tank Location: Indoors, Belowground
Tank Type: Fiberglass reinforced plastic [FRP]

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

Total Tanks: 2
Tank Secret: False
Tank Secondary Containment: None
Tank Error Status: No Missing Data
Date Entered: 08/10/1995
Certified Date: 06/14/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: Fiberglass Liner (FRP)
External Protection: Fiberglass
Pipe Location: None
Pipe Type: 0
Pipe Internal: None
Pipe External: None
Pipe Flag: None
Leak Detection: None
Overfill Protection: None
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 6301
Lat/Long: Not reported
Is Updated: False
Renew Date: Not reported
Is It There: False
Delinquent: False
Date Expired: Not reported
Owner Mark: 1
Certificate Needs to be Printed: False
Fiscal Amt for Registration Fee Correct: True
Renewal Has Been Printed for Facility: True
Pre-Printed Renewal App Last Printed: 04/30/2001

[Click this hyperlink](#) while viewing on your computer to access additional NY_AST_CBS: detail in the EDR Site Report.

SPILLS:

Facility ID: 0805409
Facility Type: ER
DER Facility ID: 351703
Site ID: 402498
DEC Region: 2
Spill Date: 8/11/2008
Spill Number/Closed Date: 0805409 / 10/7/2008
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: smsanges
Referred To: Not reported
Reported to Dept: 8/11/2008
CID: 404
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/11/2008
Spill Record Last Update: 10/7/2008
Spiller Name: JENNIFER WUOTINEN
Spiller Company: CASEY STANGEL DEPOT
Spiller Address: 123-53 WILLETS POINT BLVD
Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 001
Contact Name: JENNIFER WUOTINEN
Contact Phone: (646) 252-5777
DEC Memo: Problem with a check valve in a contained area. Repairs were made to the valve and the area was cleaned. No release beyond containment zone.

Remarks: unknown amount found in turbine sump; contained to the sump; check valve failure

Material:
Site ID: 402498
Operable Unit ID: 1159254
Operable Unit: 01
Material ID: 2150371
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0412621
Facility Type: ER
DER Facility ID: 273496
Site ID: 338169
DEC Region: 2
Spill Date: 3/1/2005
Spill Number/Closed Date: 0412621 / 3/2/2005
Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 4101
Investigator: JBVOUGHT
Referred To: Not reported
Reported to Dept: 3/1/2005
CID: 406
Water Affected: Not reported
Spill Source: Commercial Vehicle
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STANGEL (FLUSHING) BUS DEPOT (Continued)

S104073309

UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 3/1/2005
Spill Record Last Update: 3/2/2005
Spiller Name: JOSEPHINE BROWN
Spiller Company: CASEY STANGLE BUS DEPOT
Spiller Address: 123-53 WILLETS POINT
Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 001
Contact Name: JOSEPHINE BROWN
Contact Phone: (718) 243-4581
DEC Memo: 3/2/05-Vought-Spill on concrete and no sewers or drains affected.
Spill cleaned using adsorbent material. Spill closed by Vought.
Remarks: Unsecured oil filter cap on Bus#6123 released material on the ground.
Nothing else was affected. Clean up is complete.

Material:
Site ID: 338169
Operable Unit ID: 1100134
Operable Unit: 01
Material ID: 580387
Material Code: 0015
Material Name: Motor Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 6
Units: Gallons
Recovered: 6
Resource Affected: Not reported
Oxygenate: False

Tank Test:

CBS:
CBS Number: 2-000281
Program Type: CBS
Facility Status: Active
Expiration Date: 08/11/2015
Dec Region: 2
UTMX: 597601.36074999
UTMY: 4512091.7492800

B2 **COMMODITIES ASSISTANCE CORP**
NE **131-02 40TH ROAD**
1/8-1/4 **FLUSHING, NY 11354**
0.172 mi.
910 ft. **Site 1 of 2 in cluster B**

NY UST **U000411293**
NY HIST UST **N/A**

Relative: UST:
Higher Id/Status: 2-480916 / Unregulated/Closed
Program Type: PBS
Actual: Region: STATE
7 ft. DEC Region: 2
Expiration Date: 07/09/2000
UTM X: 598271.7551799998
UTM Y: 4512311.9471199997

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COMMODITIES ASSISTANCE CORP (Continued)

U000411293

Site Type:	Other
Affiliation Records:	
Site Id:	21479
Affiliation Type:	Facility Owner
Company Name:	SHAPE UP INC (NYCIDA)
Contact Type:	Not reported
Contact Name:	Not reported
Address1:	131-02 40TH ROAD
Address2:	Not reported
City:	FLUSHING
State:	NY
Zip Code:	11354
Country Code:	001
Phone:	(718) 939-8000
E-Mail:	Not reported
Fax Number:	Not reported
Modified By:	TRANSLAT
Date Last Modified:	3/4/2004
Site Id:	21479
Affiliation Type:	Mail Contact
Company Name:	SHAPE UP INC (NYCIDA)
Contact Type:	Not reported
Contact Name:	B. DRECHER
Address1:	131-02 40TH ROAD
Address2:	Not reported
City:	FLUSHING
State:	NY
Zip Code:	11354
Country Code:	001
Phone:	(718) 939-8000
E-Mail:	Not reported
Fax Number:	Not reported
Modified By:	TRANSLAT
Date Last Modified:	3/4/2004
Site Id:	21479
Affiliation Type:	On-Site Operator
Company Name:	COMMODITIES ASSISTANCE CORP
Contact Type:	Not reported
Contact Name:	JOSEPH S RADFORD
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	001
Phone:	(718) 939-8000
E-Mail:	Not reported
Fax Number:	Not reported
Modified By:	TRANSLAT
Date Last Modified:	3/4/2004
Site Id:	21479
Affiliation Type:	Emergency Contact
Company Name:	SHAPE UP INC (NYCIDA)
Contact Type:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COMMODITIES ASSISTANCE CORP (Continued)

U000411293

Contact Name: JOSEPH S RADFORD
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 939-8000
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 001
Tank ID: 39102
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: Not reported
Date Tank Closed: 07/01/1998
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: 03
Date Test: 05/01/1995
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

HIST UST:

PBS Number: 2-480916
SPDES Number: Not reported
Emergency Contact: JOSEPH S RADFORD
Emergency Telephone: (718) 939-8000
Operator: JOSEPH S RADFORD
Operator Telephone: (718) 939-8000
Owner Name: SHAPE UP INC (NYCIDA)
Owner Address: 131-02 40TH ROAD
Owner City,St,Zip: FLUSHING, NY 11354
Owner Telephone: (718) 939-8000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COMMODITIES ASSISTANCE CORP (Continued)

U000411293

Owner Type: Corporate/Commercial
Owner Subtype: Not reported
Mailing Name: SHAPE UP INC (NYCIDA)
Mailing Address: 131-02 40TH ROAD
Mailing Address 2: Not reported
Mailing City, St, Zip: FLUSHING, NY 11354
Mailing Contact: B. DRECHER
Mailing Telephone: (718) 939-8000
Owner Mark: First Owner
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons)
and Subpart 360-14.
Facility Addr2: 131002 40TH ROAD
SWIS ID: 6301
Old PBS Number: Not reported
Facility Type: OTHER
Inspected Date: Not reported
Inspector: Not reported
Inspection Result: Not reported
Federal ID: Not reported
Certification Flag: False
Certification Date: 06/16/1995
Expiration Date: 07/09/2000
Renew Flag: False
Renewal Date: Not reported
Total Capacity: 0
FAMT: True
Facility Screen: No Missing Data
Owner Screen: Minor Data Missing
Tank Screen: 0
Dead Letter: False
CBS Number: Not reported
Town or City: NEW YORK CITY
County Code: 63
Town or City: 01
Region: 2

Tank Id: 001
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 4000
Product Stored: DIESEL
Tank Type: Steel/carbon steel
Tank Internal: None
Tank External: None
Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: None
Second Containment: None
Leak Detection: None
Overfill Prot: None
Dispenser: Suction
Date Tested: 05/01/1995
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: 07/01/1998

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COMMODITIES ASSISTANCE CORP (Continued)

U000411293

Test Method: Horner EZ Check
Deleted: False
Updated: True
Lat/long: Not reported

C3
ENE
1/8-1/4
0.182 mi.
960 ft.

UNK
41-06 DELONG ST
NEW YORK CITY, NY
Site 1 of 3 in cluster C

NY LTANKS S100145008
NY Spills N/A

Relative:
Higher

LTANKS:

Actual:
15 ft.

Site ID: 217003
Spill Number/Closed Date: 8710088 / 3/13/2003
Spill Date: 3/1/1988
Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates a file or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 3/1/1988
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 3/2/1988
Spill Record Last Update: 2/17/2004
Spiller Name: Not reported
Spiller Company: METROPOLITAN DISTRIBUTORS
Spiller Address: 41-06 DELONG ST
Spiller City,St,Zip: FLUSHING, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 179664
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"3/13/2003 - Closed Due To The Nature / Extent Of The Spill Report.Refer To 92-08631.

Remarks: WILL TRY TO REPAIR TANK.

Material:

Site ID: 217003
Operable Unit ID: 915008
Operable Unit: 01
Material ID: 461874
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNK (Continued)

S100145008

Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 217003
Spill Tank Test: 1533351
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

SPILLS:

Facility ID: 8809586
Facility Type: ER
DER Facility ID: 108133
Site ID: 124917
DEC Region: 2
Spill Date: 3/14/1989
Spill Number/Closed Date: 8809586 / 11/6/2001
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: TOMASELLO
Referred To: Not reported
Reported to Dept: 3/14/1989
CID: Not reported
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Local Agency
Cleanup Ceased: 11/6/2001
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 3/20/1989
Spill Record Last Update: 2/17/2004
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: ***Update***, ZZ
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Not reported
Remarks: NYCFD & NYCDEP EN ROUTE.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNK (Continued)

S100145008

Material:

Site ID: 124917
Operable Unit ID: 925645
Operable Unit: 01
Material ID: 450770
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 200
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

**D4
NW
1/8-1/4
0.185 mi.
979 ft.**

**STOP 4 AUTO PARTS INC
53-30 97TH PLACE
CORONA,, NY 11368**

**NY SWF/LF S108146121
N/A**

Site 1 of 8 in cluster D

**Relative:
Higher**

SWF/LF:

Flag: INACTIVE
Region Code: 2
Phone Number: 7188985653
Owner Name: Stop 4 Auto Parts Inc
Owner Type: Private
Owner Address: 53-30 97th Place
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7188985653
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597701
North Coordinate: 4512281
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
9 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

D5
NNW
1/8-1/4
0.186 mi.
980 ft.

12625 ROOSEVELT AVE
CORONA, NY 11368

Site 2 of 8 in cluster D

EDR US Hist Auto Stat

1015195242
N/A

Relative:
Higher

EDR Historical Auto Stations:

Actual:
9 ft.

Name: CENTRAL AUTO REPAIR
Year: 2001
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2002
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2003
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2004
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2005
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2007
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2008
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2009
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2010
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTOMOBILE REPAIR
Year: 2011
Address: 12625 ROOSEVELT AVE

Name: CENTRAL AUTO REPAIR
Year: 2012
Address: 12625 ROOSEVELT AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A6
NW
1/8-1/4
0.188 mi.
991 ft.

12602 ROOSEVELT AVE
CORONA, NY 11368

Site 2 of 6 in cluster A

EDR US Hist Auto Stat 1015194944
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: T & F AUTO REPAIR CENTER INCORPORATED
Year: 1999
Address: 12602 ROOSEVELT AVE

Actual:
10 ft.

Name: T & F AUTO REPAIR CENTER INCORPORATED
Year: 2000
Address: 12602 ROOSEVELT AVE

Name: T & F AUTO REPAIR CTR INC
Year: 2001
Address: 12602 ROOSEVELT AVE

Name: T & F AUTO REPAIR CTR INC
Year: 2002
Address: 12602 ROOSEVELT AVE

Name: FT AUTO REPAIR INC
Year: 2003
Address: 12602 ROOSEVELT AVE

Name: FT AUTO REPAIR INC
Year: 2004
Address: 12602 ROOSEVELT AVE

A7
NW
1/8-1/4
0.190 mi.
1003 ft.

MTA NYCT - WILLETS POINT SHEA STADIUM ST
ROOSEVELT AVE & 126TH ST
CORONA, NY 11368

Site 3 of 6 in cluster A

RCRA-SQG 1010566436
NY MANIFEST 1010566436
NJ MANIFEST NYR000150854

Relative:
Higher

RCRA-SQG:

Date form received by agency: 08/17/2007
Facility name: MTA NYCT - WILLETS POINT SHEA STADIUM ST
Site name: MTA NYCT - WILLETS POINT SHEA STADIUM STATION 7
Facility address: ROOSEVELT AVE & 126TH ST
CORONA, NY 11368

Actual:
10 ft.

EPA ID: NYR000150854
Mailing address: BROADWAY 5TH FLOOR
NEW YORK, NY 10004

Contact: LUMINITA MARINESCU
Contact address: BROADWAY 5TH FLOOR
NEW YORK, NY 10004

Contact country: US
Contact telephone: (646) 252-3506
Contact email: LUMINITA.MARINESCU@NYCT.COM

EPA Region: 02
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Owner/Operator Summary:

Owner/operator name: MTA NYCT
Owner/operator address: BROADWAY 5TH FLOOR
NEW YORK, NY 10004
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 03/01/1968
Owner/Op end date: Not reported

Owner/operator name: MTA NYCT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 03/01/1968
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 08/16/2007
Site name: MTA NYCT - WILLETS POINT SHEA STADIUM ST
Classification: Small Quantity Generator

Violation Status: No violations found

NY MANIFEST:

EPA ID: NYR000150854
Country: USA

Mailing Info:

Name: MTA NYCT - WILLETS PT SHEA STADIUM STATION 7
Contact: GEORGE TERDEOS
Address: 2 BROADWAY ROOM A27.64
City/State/Zip: NEW YORK, NY 10004
Country: USA
Phone: 646-252-5777

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Manifest:

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 03/30/2009
Trans1 Recv Date: 03/30/2009
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/02/2009
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 350.0
Units: P - Pounds
Number of Containers: 2.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2009
Manifest Tracking Num: 000201211WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 05/18/2011
Trans1 Recv Date: 05/18/2011
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/19/2011
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 100.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2011
Manifest Tracking Num: 000423430WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 06/13/2008
Trans1 Recv Date: 06/13/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/13/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 600.0
Units: P - Pounds
Number of Containers: 3.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 000070105WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Generator Ship Date: 07/11/2008
Trans1 Recv Date: 07/11/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/11/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 1500.0
Units: P - Pounds
Number of Containers: 5.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 000070163WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 09/12/2008
Trans1 Recv Date: 09/12/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/12/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 200.0
Units: P - Pounds
Number of Containers: 2.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 000196478WAS
Import Ind: N
Export Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 12/10/2008
Trans1 Recv Date: 12/10/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 12/10/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 400.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 000201093WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 06/19/2008
Trans1 Recv Date: 06/19/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/19/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 500.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 000070120WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 03/09/2012
Trans1 Recv Date: 03/09/2012
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/09/2012
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 200.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000457259WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD046765574
Trans2 State ID: Not reported
Generator Ship Date: 05/30/2012
Trans1 Recv Date: 05/30/2012
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/30/2012
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000150854
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: Not reported
Quantity: 200.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000457430WAS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

NJ MANIFEST:

EPA Id: NYR000150854
Mail Address: BROADWAY 5TH FLOOR
Mail City/State/Zip: NEW YORK, NY 10004
Facility Phone: Not reported
Emergency Phone: Not reported
Contact: LUMINITA MARINESCU
Comments: Not reported
SIC Code: Not reported
County: NY081
Municipal: Not reported
Previous EPA Id: Not reported
Gen Flag: Not reported
Trans Flag: Not reported
TSD Flag: Not reported
Name Change: Not reported
Date Change: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Manifest:

Manifest Number: 000423430WAS
EPA ID: NYR000150854
Date Shipped: 5/18/2011
TSDF EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: Not reported
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: Not reported
Generator EPA Facility Name: NYCT-OSS CPM CONT #A-36088
Transporter-1 EPA Facility Name: PRICE TRUCKING CORP
TSDF EPA Facility Name: CLEAN EARTH OF NORTH JERSEY INC
QTY Units: Pounds
Transporter SEQ ID: 1.00
Transporter-1 Date: 5/18/2011
Waste SEQ ID: 1.00
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: 5/19/2011
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Waste:

Manifest Year: 2011 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 100.00 Pounds

Manifest Number: 000201093WAS
EPA ID: NYR000150854
Date Shipped: 12/10/2008
TSDF EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 12/10/2008
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDf Received Waste: 12/10/2008
TSDf EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Waste:

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 400 P

Manifest Number: 000070120WAS
EPA ID: NYR000150854
Date Shipped: 06/19/2008
TSDf EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 06/19/2008
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 06/19/2008
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Waste:

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 500 P

Manifest Number: 000070163WAS
EPA ID: NYR000150854
Date Shipped: 07/11/2008
TSDF EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 07/11/2008
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 07/11/2008
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Waste:

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 1500 P

Manifest Number: 000196478WAS
EPA ID: NYR000150854
Date Shipped: 09/12/2008
TSDF EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 09/12/2008
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 09/12/2008
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

Waste:

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 200 P

Manifest Number: 000201211WAS
EPA ID: NYR000150854
Date Shipped: 03/30/2009
TSDF EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 03/30/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 04/02/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Waste:

Manifest Year: 2009 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 350 P

Manifest Number: 000070105WAS
EPA ID: NYR000150854
Date Shipped: 06/13/2008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MTA NYCT - WILLETS POINT SHEA STADIUM ST (Continued)

1010566436

TSDF EPA ID: NJD991291105
Transporter EPA ID: NYD046765574
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 06/13/2008
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 06/13/2008
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: NEW YORK, NY 10004
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D008
Hand Code: H111
Quantity: 600 P

A8
NW
1/8-1/4
0.191 mi.
1008 ft.

**12601 ROOSEVELT AVE
CORONA-A, NY 11368**
Site 4 of 6 in cluster A

**EDR US Hist Auto Stat 1015194919
N/A**

**Relative:
Higher**

EDR Historical Auto Stations:
Name: TRIPLE A GLASS & TIRE SERVICE INC
Year: 2006
Address: 12601 ROOSEVELT AVE

**Actual:
10 ft.**

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A9
NW
1/8-1/4
0.191 mi.
1008 ft.

12601 ROOSEVELT AVE
CORONA, NY 11368

EDR US Hist Auto Stat **1015194920**
N/A

Site 5 of 6 in cluster A

Relative:
Higher

EDR Historical Auto Stations:

Name: NACIONES UNIDAS TIRE & MUFFLER
Year: 2005
Address: 12601 ROOSEVELT AVE

Actual:
10 ft.

Name: TRIPLE A GLASS & TIRE SERVICE INC
Year: 2007
Address: 12601 ROOSEVELT AVE

Name: AA GLASS & TIRE SERVICE INC
Year: 2009
Address: 12601 ROOSEVELT AVE

A10
NW
1/8-1/4
0.191 mi.
1009 ft.

NYCTA-SUBSTATION 28
WILLETS POINT AND ROOSEVELT
FLUSHING, NY 11201

RCRA NonGen / NLR **1000912741**
NY MANIFEST **NY0000904508**

Site 6 of 6 in cluster A

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: NYCTA-SUBSTATION 28
Facility address: WILLETS POINT AND ROOSEVELT
 AVENUE
 FLUSHING, NY 11201
EPA ID: NY0000904508
Mailing address: JAY STREET, ROOM 819
 BROOKLYN, NY 11201
Contact: JOSEPHINE F BROWN
Contact address: JAY STREET, ROOM 819
 BROOKLYN, NY 11201

Actual:
10 ft.

Contact country: US
Contact telephone: (718) 243-4581
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NEW YORK CITY TRANSIT AUTHORITY
Owner/operator address: 370 JAY ST ROOM 809
 BROOKLYN, NY 11201
Owner/operator country: US
Owner/operator telephone: (718) 330-4581
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NEW YORK CITY TRANSIT AUTHORITY
Owner/operator address: 370 JAY ST ROOM 809
 BROOKLYN, NY 11201

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Owner/operator country: US
Owner/operator telephone: (718) 330-4581
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: NYCTA-SUBSTATION 28
Classification: Not a generator, verified

Date form received by agency: 02/20/2002
Site name: NYCTA-SUBSTATION 28
Classification: Large Quantity Generator

Date form received by agency: 07/08/1999
Site name: NYCTA - SUBSTATION #28
Classification: Not a generator, verified

Date form received by agency: 10/26/1994
Site name: NYCTA - SUBSTATION #28
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: X001
. Waste name: WASTE OILS

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Listing - General
Date violation determined: 12/11/2007
Date achieved compliance: 02/12/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/31/2007
Enf. disposition status: Action Satisfied (Case Closed)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Enf. disp. status date: 02/27/2008
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 12/11/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Listing - General
Date achieved compliance: 02/12/2008
Evaluation lead agency: State

NY MANIFEST:

EPA ID: NY0000904508
Country: USA

Mailing Info:

Name: NEW YORK CITY TRANSIT AUTHORITY
Contact: ANTHONY CASSELLA
Address: 370 JAY ST RM 809
City/State/Zip: BROOKLYN, NY 11201
Country: USA
Phone: 718-240-3119

Manifest:

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJ0000027193
Trans2 State ID: Not reported
Generator Ship Date: 02/01/2008
Trans1 Recv Date: 02/01/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/01/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD002200046
Waste Code: Not reported
Quantity: 280.0
Units: K - Kilograms (2.2 pounds)
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 003535294JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: Y
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJ0000027193
Trans2 State ID: Not reported
Generator Ship Date: 02/01/2008
Trans1 Recv Date: 02/01/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/01/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD002200046
Waste Code: Not reported
Quantity: 129.0
Units: K - Kilograms (2.2 pounds)
Number of Containers: 4.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 003535294JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: Y
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJ0000027193
Trans2 State ID: Not reported
Generator Ship Date: 02/01/2008
Trans1 Recv Date: 02/01/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/01/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD002200046
Waste Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Quantity: 410.0
Units: K - Kilograms (2.2 pounds)
Number of Containers: 3.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 003535294JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: Y
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJ0000027193
Trans2 State ID: Not reported
Generator Ship Date: 01/10/2008
Trans1 Recv Date: 01/10/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/10/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD002200046
Waste Code: Not reported
Quantity: 15.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 003535190JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H111

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Document ID: NYG1945332
Manifest Status: Not reported
Trans1 State ID: 0440464ME
Trans2 State ID: Not reported
Generator Ship Date: 03/16/2001
Trans1 Recv Date: 03/16/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/20/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NJD054126164
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 03000
Units: P - Pounds
Number of Containers: 025
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG2972988
Manifest Status: Not reported
Trans1 State ID: 0440465ME
Trans2 State ID: Not reported
Generator Ship Date: 09/28/2001
Trans1 Recv Date: 09/28/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/18/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NJD054126164
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00050
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NJA4144152
Manifest Status: Not reported
Trans1 State ID: S8424
Trans2 State ID: Not reported
Generator Ship Date: 10/16/2002
Trans1 Recv Date: 10/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/16/2002
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NYD046765574
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00050
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NYB4589208
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: NJDEPS581
Trans2 State ID: Not reported
Generator Ship Date: 12/12/1994
Trans1 Recv Date: 12/12/1994
Trans2 Recv Date: / /
TSD Site Recv Date: 12/15/1994
Part A Recv Date: 12/28/1994
Part B Recv Date: 01/26/1995
Generator EPA ID: NY0000904508
Trans1 EPA ID: NJD982281016
Trans2 EPA ID: Not reported
TSD ID: PAD981113749
Waste Code: B003 - PETROLEUM OIL WITH 500 PPM OR > PCB
Quantity: 04476
Units: K - Kilograms (2.2 pounds)
Number of Containers: 002
Container Type: CM - Metal boxes, cases, roll-offs
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Waste Code: B003 - PETROLEUM OIL WITH 500 PPM OR > PCB
Quantity: 00965
Units: K - Kilograms (2.2 pounds)
Number of Containers: 006
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: B003 - PETROLEUM OIL WITH 500 PPM OR > PCB
Quantity: 00041
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Waste Code: B003 - PETROLEUM OIL WITH 500 PPM OR > PCB
Quantity: 00087
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Year: 1994

Document ID: NJA4049767
Manifest Status: Not reported
Trans1 State ID: S8424
Trans2 State ID: Not reported
Generator Ship Date: 06/24/2002
Trans1 Recv Date: 06/24/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/24/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NYD046765574
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00100
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NJA4042516
Manifest Status: Not reported
Trans1 State ID: S8429
Trans2 State ID: Not reported
Generator Ship Date: 10/16/2001
Trans1 Recv Date: 10/16/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/16/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NYD046765574
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00200
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NJA3206518
Manifest Status: Not reported
Trans1 State ID: S8424
Trans2 State ID: Not reported
Generator Ship Date: 03/21/2001
Trans1 Recv Date: 03/21/2001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/23/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NYD046765574
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D009 - MERCURY 0.2 MG/L TCLP
Quantity: 00600
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NJA4087906
Manifest Status: Not reported
Trans1 State ID: 58424
Trans2 State ID: Not reported
Generator Ship Date: 04/09/2002
Trans1 Recv Date: 04/09/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/10/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NYD046765574
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00500
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NJA3292504
Manifest Status: Not reported
Trans1 State ID: S8424X
Trans2 State ID: Not reported
Generator Ship Date: 06/13/2001
Trans1 Recv Date: 06/13/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/13/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000904508
Trans1 EPA ID: NYD046765574
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCTA-SUBSTATION 28 (Continued)

1000912741

Quantity: 00900
Units: P - Pounds
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

**B11
NE
1/8-1/4
0.198 mi.
1045 ft.**

**COMMODITIES ASSISTANE CORP
40TH RD
FLUSHING, NY 11354**

**RCRA NonGen / NLR 1007112516
NY MANIFEST NYR000117069**

Site 2 of 2 in cluster B

**Relative:
Higher**

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007

Facility name: COMMODITIES ASSISTANE CORP

**Actual:
9 ft.**

Facility address: 40TH RD
FLUSHING, NY 11354

EPA ID: NYR000117069

Mailing address: MILLER PL
HICKSVILLE, NY 11801

Contact: GLENN T KOSLOWSKY

Contact address: MILLER PL
HICKSVILLE, NY 11801

Contact country: US

Contact telephone: (516) 822-4700

Telephone ext.: 136

Contact email: CACCORP2000@AOL.COM

EPA Region: 02

Land type: Private

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: SHAPE UP INC

Owner/operator address: UNKNOWN
UNKNOWN, NY 99999

Owner/operator country: US

Owner/operator telephone: (212) 555-1212

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 11/26/1996

Owner/Op end date: Not reported

Owner/operator name: COMMODITIES ASSISTANCE CORP

Owner/operator address: 40TH RD
FLUSHING, NY 11354

Owner/operator country: US

Owner/operator telephone: (718) 939-8000

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 11/26/1996

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COMMODITIES ASSISTANE CORP (Continued)

1007112516

Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: COMMODITIES ASSISTANE CORP
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/16/2004
Site name: COMMODITIES ASSISTANE CORP
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Date form received by agency: 07/17/2003
Site name: COMMODITIES ASSISTANCE CORP
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 07/11/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

NY MANIFEST:

EPA ID: NYR000117069
Country: USA

Mailing Info:

Name: COMMODITIES ASSISTANCE CORP
Contact: GLENN KOSLOWSKY
Address: 131 02 40TH STREET

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COMMODITIES ASSISTANE CORP (Continued)

1007112516

City/State/Zip: FLUSHING, NY 11354
Country: USA
Phone: Not reported

Manifest:

Document ID: NYG1979856
Manifest Status: Not reported
Trans1 State ID: AG28910NY
Trans2 State ID: Not reported
Generator Ship Date: 07/30/2003
Trans1 Recv Date: 07/30/2003
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/08/2003
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000117069
Trans1 EPA ID: NYD049178296
Trans2 EPA ID: Not reported
TSD ID: NYD049178296
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 07200
Units: P - Pounds
Number of Containers: 018
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00150
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00400
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00600
Units: P - Pounds
Number of Containers: 003
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2003

Document ID: NYG1979847
Manifest Status: Not reported
Trans1 State ID: AD67988NY
Trans2 State ID: Not reported
Generator Ship Date: 07/30/2003
Trans1 Recv Date: 07/30/2003

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

COMMODITIES ASSISTANE CORP (Continued)

1007112516

Trans2 Recv Date: Not reported
 TSD Site Recv Date: 08/08/2003
 Part A Recv Date: Not reported
 Part B Recv Date: Not reported
 Generator EPA ID: NYR000117069
 Trans1 EPA ID: NYD049178296
 Trans2 EPA ID: Not reported
 TSD ID: NYD049178296
 Waste Code: D001 - NON-LISTED IGNITABLE WASTES
 Quantity: 01600
 Units: P - Pounds
 Number of Containers: 004
 Container Type: DM - Metal drums, barrels
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 01.00
 Year: 2003

**D12
 NW
 1/8-1/4
 0.206 mi.
 1090 ft.**

**CASEY STENGEL DEPOT
 123-53 WILLET PT. RD
 FLUSHING, NY**

**NY LTANKS S104951098
 N/A**

Site 3 of 8 in cluster D

**Relative:
 Higher**

LTANKS:

**Actual:
 9 ft.**

Site ID: 235829
 Spill Number/Closed Date: 9309299 / 1/24/2003
 Spill Date: 11/1/1993
 Spill Cause: Tank Test Failure
 Spill Source: Institutional, Educational, Gov., Other
 Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
 Cleanup Ceased: Not reported
 Cleanup Meets Standard: False
 SWIS: 4101
 Investigator: MCTIBBE
 Referred To: Not reported
 Reported to Dept: 11/1/1993
 CID: Not reported
 Water Affected: Not reported
 Spill Notifier: Tank Tester
 Last Inspection: Not reported
 Recommended Penalty: False
 UST Involvement: True
 Remediation Phase: 0
 Date Entered In Computer: 11/1/1993
 Spill Record Last Update: 1/24/2003
 Spiller Name: JOSEPHINE BROWN
 Spiller Company: NYCT
 Spiller Address: 370 JAY STREET
 Spiller City,St,Zip: BROOKLYN, NY
 Spiller County: 001
 Spiller Contact: Not reported
 Spiller Phone: Not reported
 Spiller Extention: Not reported
 DEC Region: 2
 DER Facility ID: 194263
 DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"transferred from Hale to tibbe on 12/27/00. see also 95-06056 &

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S104951098

Remarks: 95-14180. tanks repaired/replace/upgraded. remediation pening. remediation complete. see file.
RECOMEND - EX - ISO & RETEST - SUSPET PIPING.

Material:

Site ID: 235829
Operable Unit ID: 990841
Operable Unit: 01
Material ID: 391961
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 235829
Spill Tank Test: 1542149
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

E13
ESE
1/8-1/4
0.207 mi.
1093 ft.

131-05 FOWLER AVE
131-05 FOWLER AVENUE
FLUSHING, NY 11355
Site 1 of 2 in cluster E

NY UST **U000399591**
NY E DESIGNATION **N/A**

Relative:
Higher

UST:

Id/Status: 2-202894 / Active
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 06/18/2018
UTM X: 598315.92859000002
UTM Y: 4511820.7915200004
Site Type: Apartment Building/Office Building

Actual:
16 ft.

Affiliation Records:

Site Id: 6973
Affiliation Type: Mail Contact
Company Name: Not reported
Contact Type: Not reported
Contact Name: RAND MILTON
Address1: 526 TURNBULL PLACE
Address2: Not reported
City: BRIDGEWATER

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

State: NJ
Zip Code: 08807
Country Code: 001
Phone: (908) 927-1017
EMail: RAND@RPMWEBPROS.COM
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 2/18/2014

Site Id: 6973
Affiliation Type: On-Site Operator
Company Name: 131-05 FOWLER AVE
Contact Type: Not reported
Contact Name: AISIA FURNITURE IMPORT, INC.
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 939-4989
EMail: Not reported
Fax Number: Not reported
Modified By: DXLIVING
Date Last Modified: 7/9/2007

Site Id: 6973
Affiliation Type: Emergency Contact
Company Name: BANSHEE REALTY LLC % RAND MILTON
Contact Type: Not reported
Contact Name: RAND MILTON
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (973) 699-6639
EMail: Not reported
Fax Number: Not reported
Modified By: DXLIVING
Date Last Modified: 7/9/2007

Site Id: 6973
Affiliation Type: Facility Owner
Company Name: DONN MILTON
Contact Type: OWNER
Contact Name: RAND HILTON
Address1: 526 TURNBULL PLACE
Address2: Not reported
City: BRIDGEWATER
State: NJ
Zip Code: 08807
Country Code: 001
Phone: (908) 927-1017
EMail: Not reported
Fax Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

Modified By: MSBAPTIS
Date Last Modified: 2/18/2014

Tank Info:

Tank Number: 001
Tank ID: 12486
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 3000
Install Date: 07/01/1953
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: 21
Date Test: 04/02/2012
Next Test Date: 04/02/2017
Pipe Model: Not reported
Modified By: MSBAPTIS
Last Modified: 02/18/2014

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A01 - Tank Internal Protection - Epoxy Liner
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None
K00 - Spill Prevention - None

E DESIGNATION:

Tax Lot(s): 31
E-No: E-290
Effective Date: 3/13/2013
Satisfaction Date: Not reported
Ceqr Number: 07DCP050Q
Ulurp Number: 070352ZMQ
Zoning Map No: 10b
Description: Air Quality - HVAC fuel limited to natural gas
Borough Code: QN
Community District: 407
Census Tract: 875
Census Block: 1010
School District: 25
City Council District: 20
Fire Company: L129
Health Area: 43
Police Precinct: 109

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

Zone District 1: M1-2
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M1-2
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E1
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: BANSHEE REALTY LLC C/
Lot Area: 000023000
Total Building Floor Area: 00000023456
Commercial Floor Area: 00000023456
Office Floor Area: 00000002376
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000019000
Factory Floor Area: 00000002080
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00004
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0200.00
Lot Depth: 0110.00
Building Frontage: 0200.83
Building Depth: 0110.83
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000183600
Total Assessed Value: 00000508500
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1954
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0001.02
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4050760031
Condominium Number: 00000
Census Tract 2: 0875
X Coordinate: 1029996
Y Coordinate: 0213198
Zoning Map: 10B
Sanborn Map: 411 012
Tax Map: 42503

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

E Designation No:	Not reported
Date of RPAD Data:	11/2005
Date of DCAS Data:	01/2006
Date of Zoning Data:	11/2005
Date of Major Property Data:	11/2005
Date of Landmark Data:	12/2005
Date of Base Map Data:	01/2006
Date of Mass Appraisal Data:	11/2005
Date of Political and Adm Data:	08/2005
Pluto-Base Map Indicator:	1
Tax Lot(s):	31
E-No:	E-290
Effective Date:	3/13/2013
Satisfaction Date:	Not reported
Ceqr Number:	07DCP050Q
Ulurp Number:	070352ZMQ
Zoning Map No:	10b
Description:	Exhaust stack location limitations
Borough Code:	QN
Community District:	407
Census Tract:	875
Census Block:	1010
School District:	25
City Council District:	20
Fire Company:	L129
Health Area:	43
Police Precinct:	109
Zone District 1:	M1-2
Zone District 2:	Not reported
Commercial Overlay1:	Not reported
Commercial Overlay2:	Not reported
Special Purpose District1:	Not reported
Special Purpose District2:	Not reported
All Components1:	M1-2
All Components2:	Not reported
Split Boundary Indicator:	N
Building Class:	E1
Land Use Category:	06
Number of Easements:	0
Owner, Type of Code:	P
Owner Name:	BANSHEE REALTY LLC C/
Lot Area:	000023000
Total Building Floor Area:	00000023456
Commercial Floor Area:	00000023456
Office Floor Area:	00000002376
Retail Floor Area:	00000000000
Garage Floor Area:	00000000000
Storage Floor Area:	00000019000
Factory Floor Area:	00000002080
Other Floor Area:	00000000000
Floor Area,Total Bld Source Code:	7
Number of Buildings:	00004
Number of Floors:	001.00
Residential Units:	00000
Non and Residential Units:	00001
Lot Frontage:	0200.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

Lot Depth: 0110.00
Building Frontage: 0200.83
Building Depth: 0110.83
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000183600
Total Assessed Value: 00000508500
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1954
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0001.02
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4050760031
Condominium Number: 00000
Census Tract 2: 0875
X Coordinate: 1029996
Y Coordinate: 0213198
Zoning Map: 10B
Sanborn Map: 411 012
Tax Map: 42503
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 31
E-No: E-290
Effective Date: 3/13/2013
Satisfaction Date: Not reported
Ceqr Number: 07DCP050Q
Ulurp Number: 070352ZMQ
Zoning Map No: 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 875
Census Block: 1010
School District: 25
City Council District: 20
Fire Company: L129
Health Area: 43
Police Precinct: 109
Zone District 1: M1-2

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

Zone District 2:	Not reported
Commercial Overlay1:	Not reported
Commercial Overlay2:	Not reported
Special Purpose District1:	Not reported
Special Purpose District2:	Not reported
All Components1:	M1-2
All Components2:	Not reported
Split Boundary Indicator:	N
Building Class:	E1
Land Use Category:	06
Number of Easements:	0
Owner, Type of Code:	P
Owner Name:	BANSHEE REALTY LLC C/
Lot Area:	000023000
Total Building Floor Area:	00000023456
Commercial Floor Area:	00000023456
Office Floor Area:	00000002376
Retail Floor Area:	00000000000
Garage Floor Area:	00000000000
Storage Floor Area:	00000019000
Factory Floor Area:	00000002080
Other Floor Area:	00000000000
Floor Area,Total Bld Source Code:	7
Number of Buildings:	00004
Number of Floors:	001.00
Residential Units:	00000
Non and Residential Units:	00001
Lot Frontage:	0200.00
Lot Depth:	0110.00
Building Frontage:	0200.83
Building Depth:	0110.83
Proximity Code:	0
Irregular Lot Code:	N
Lot Type:	5
Basement Type Grade:	5
Land Assessed Value:	00000183600
Total Assessed Value:	00000508500
Land Exempt Value:	00000000000
Total Exempt Value:	00000000000
Year Built:	1954
Year Built Code:	E
Year Altered1:	0000
Year Altered2:	0000
Historic District Name:	Not reported
Landmark Name:	Not reported
Built Floor Area Ratio-Far:	0001.02
Maximum Allowable Far:	02.00
Borough Code:	4
Borough Tax Block And Lot:	4050760031
Condominium Number:	00000
Census Tract 2:	0875
X Coordinate:	1029996
Y Coordinate:	0213198
Zoning Map:	10B
Sanborn Map:	411 012
Tax Map:	42503
E Designation No:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 31
E-No: E-290
Effective Date: 3/13/2013
Satisfaction Date: Not reported
Ceqr Number: 07DCP050Q
Ulurp Number: 070352ZMQ
Zoning Map No: 10b
Description: Hazardous Materials* Phase I and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 875
Census Block: 1010
School District: 25
City Council District: 20
Fire Company: L129
Health Area: 43
Police Precinct: 109
Zone District 1: M1-2
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M1-2
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E1
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: BANSHEE REALTY LLC C/
Lot Area: 000023000
Total Building Floor Area: 00000023456
Commercial Floor Area: 00000023456
Office Floor Area: 00000002376
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000019000
Factory Floor Area: 00000002080
Other Floor Area: 00000000000
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00004
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0200.00
Lot Depth: 0110.00

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

131-05 FOWLER AVE (Continued)

U000399591

Building Frontage: 0200.83
 Building Depth: 0110.83
 Proximity Code: 0
 Irregular Lot Code: N
 Lot Type: 5
 Basement Type Grade: 5
 Land Assessed Value: 00000183600
 Total Assessed Value: 00000508500
 Land Exempt Value: 00000000000
 Total Exempt Value: 00000000000
 Year Built: 1954
 Year Built Code: E
 Year Altered1: 0000
 Year Altered2: 0000
 Historic District Name: Not reported
 Landmark Name: Not reported
 Built Floor Area Ratio-Far: 0001.02
 Maximum Allowable Far: 02.00
 Borough Code: 4
 Borough Tax Block And Lot: 4050760031
 Condominium Number: 00000
 Census Tract 2: 0875
 X Coordinate: 1029996
 Y Coordinate: 0213198
 Zoning Map: 10B
 Sanborn Map: 411 012
 Tax Map: 42503
 E Designation No: Not reported
 Date of RPAD Data: 11/2005
 Date of DCAS Data: 01/2006
 Date of Zoning Data: 11/2005
 Date of Major Property Data: 11/2005
 Date of Landmark Data: 12/2005
 Date of Base Map Data: 01/2006
 Date of Mass Appraisal Data: 11/2005
 Date of Political and Adm Data: 08/2005
 Pluto-Base Map Indicator: 1

E14
ESE
1/8-1/4
0.207 mi.
1093 ft.

NYCDEP FLUSHING BAY CS4-3
131-01 FOWLER AVE
FLUSHING, NY 11355
Site 2 of 2 in cluster E

RCRA NonGen / NLR 1001029136
FINDS NYR000013680
NY MANIFEST

Relative:
Higher

RCRA NonGen / NLR:
 Date form received by agency: 01/01/2007
 Facility name: NYCDEP FLUSHING BAY CS4-3
 Facility address: 131-01 FOWLER AVE
 FLUSHING, NY 11355
 EPA ID: NYR000013680
 Mailing address: FOWLER AVE
 FLUSHING, NY 11355
 Contact: Not reported
 Contact address: FOWLER AVE
 FLUSHING, NY 11355
 Contact country: US
 Contact telephone: Not reported
 Contact email: Not reported

Actual:
16 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

EPA Region: 02
Land type: Municipal
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NYCDEP
Owner/operator address: 96-05 HORACE HARDING EXPWY
CORONA, NY 11368

Owner/operator country: US
Owner/operator telephone: (718) 595-6096
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NYCDEP
Owner/operator address: 96-05 HORACE HARDING EXPWY
CORONA, NY 11368

Owner/operator country: US
Owner/operator telephone: (718) 595-6096
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: NYCDEP FLUSHING BAY CS4-3
Classification: Not a generator, verified

Date form received by agency: 01/01/2001
Site name: NYCDEP FLUSHING BAY
Classification: Large Quantity Generator

Date form received by agency: 07/14/1999
Site name: NYCDEP FLUSHING BAY CS4-3
Classification: Small Quantity Generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Date form received by agency: 04/16/1998
Site name: NYCDEP FLUSHING BAY CS4-3
Classification: Large Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D008
. Waste name: LEAD

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/07/1996
Date achieved compliance: 02/05/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/07/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/07/1996
Date achieved compliance: 02/05/1997
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 02/05/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 1200
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 01/01/1996
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Records/Reporting
Date achieved compliance: 02/05/1997
Evaluation lead agency: State

FINDS:

Registry ID: 110004518763

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYR000013680
Country: USA

Mailing Info:

Name: NEW YORK CITY DEP
Contact: RICHARD CARTER
Address: 96-05 HORACE HARDING EXPSWY
City/State/Zip: CORONA, NY 11368
Country: USA
Phone: 718-595-6239

Manifest:

Document ID: NJA4149794
Manifest Status: Not reported
Trans1 State ID: 050181
Trans2 State ID: Not reported
Generator Ship Date: 07/16/2002
Trans1 Recv Date: 07/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/16/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NJR000029967
Trans2 EPA ID: Not reported
TSDF ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 45260
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NJA4149795
Manifest Status: Not reported
Trans1 State ID: 50181
Trans2 State ID: Not reported
Generator Ship Date: 07/16/2002
Trans1 Recv Date: 07/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/16/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NJR000029967
Trans2 EPA ID: Not reported
TSDF ID: NJD991291105

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 36240
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NJA4149796
Manifest Status: Not reported
Trans1 State ID: 050181
Trans2 State ID: Not reported
Generator Ship Date: 07/16/2002
Trans1 Recv Date: 07/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/16/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NJR000029967
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 61420
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NJA4149797
Manifest Status: Not reported
Trans1 State ID: 50181X
Trans2 State ID: Not reported
Generator Ship Date: 07/16/2002
Trans1 Recv Date: 07/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/16/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NJR000029967
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 49680
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Document ID: NJA4149798
Manifest Status: Not reported
Trans1 State ID: 050181
Trans2 State ID: Not reported
Generator Ship Date: 07/16/2002
Trans1 Recv Date: 07/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/16/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NJR000029967
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 56000
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: NJA4149799
Manifest Status: Not reported
Trans1 State ID: 050181
Trans2 State ID: Not reported
Generator Ship Date: 07/16/2002
Trans1 Recv Date: 07/16/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/16/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NJR000029967
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 51340
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2002

Document ID: PAE8892671
Manifest Status: Not reported
Trans1 State ID: PAAH0549
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD010154045
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 70900
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892682
Manifest Status: Not reported
Trans1 State ID: PAAH0549
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD010154045
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 61520
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892693
Manifest Status: Not reported
Trans1 State ID: PAAH0549
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD010154045
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 64920
Units: P - Pounds
Number of Containers: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892704
Manifest Status: Not reported
Trans1 State ID: PAAH0549
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD010154045
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 63040
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892715
Manifest Status: Not reported
Trans1 State ID: PAAH0549
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD010154045
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 43760
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892726
Manifest Status: Not reported
Trans1 State ID: PAAH0549

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD010154045
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 50580
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892730
Manifest Status: Not reported
Trans1 State ID: PAAH0042
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD008781072
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 54200
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892741
Manifest Status: Not reported
Trans1 State ID: PAAH0042
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD008781072

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Trans2 EPA ID: Not reported
TSDF ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 51140
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892752
Manifest Status: Not reported
Trans1 State ID: PAAH0042
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD008781072
Trans2 EPA ID: Not reported
TSDF ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 47840
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892763
Manifest Status: Not reported
Trans1 State ID: PAAH0042
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD008781072
Trans2 EPA ID: Not reported
TSDF ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 60680
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Year: 1998

Document ID: PAE8892774
Manifest Status: Not reported
Trans1 State ID: PAAH0042
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD008781072
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 50660
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: PAE8892785
Manifest Status: Not reported
Trans1 State ID: PAAH0042
Trans2 State ID: Not reported
Generator Ship Date: 08/05/1998
Trans1 Recv Date: 08/05/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/05/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: PAD008781072
Trans2 EPA ID: Not reported
TSD ID: PAD010154045
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 44720
Units: P - Pounds
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: NJA2621265
Manifest Status: Not reported
Trans1 State ID: S50010
Trans2 State ID: Not reported
Generator Ship Date: 06/19/1998
Trans1 Recv Date: 06/19/1998

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYCDEP FLUSHING BAY CS4-3 (Continued)

1001029136

Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/19/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NYD986969947
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00023
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

Document ID: NJA2862053
Manifest Status: Not reported
Trans1 State ID: S50010
Trans2 State ID: Not reported
Generator Ship Date: 05/30/1998
Trans1 Recv Date: 05/30/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/30/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000013680
Trans1 EPA ID: NYD986969947
Trans2 EPA ID: Not reported
TSD ID: NJD991291105
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00025
Units: T - Tons
Number of Containers: 001
Container Type: CM - Metal boxes, cases, roll-offs
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: 1998

D15
NW
1/8-1/4
0.209 mi.
1104 ft.

**WILLETS POINT DEVELOPMENT
126TH ST./WILLETS POINT BLVD.
QUEENS, NY 11368**

**NY BROWNFIELDS S113813699
N/A**

Site 4 of 8 in cluster D

**Relative:
Higher**

BROWNFIELDS:

Program: BCP
Site Code: 479867
Acres: 23.500
HW Code: C241146
SWIS: 4101
Town: New York City
Update By: JHOCONNE

**Actual:
9 ft.**

Site Description: Location: This site is located in the Willets Point district of Queens County. The site is approximately 17.9 acres in size and consists of 45 tax parcels. The project area is property bordered on

MAP FINDINGS

WILLETS POINT DEVELOPMENT (Continued)

S113813699

the west by 126th Street, on the south and east by Willets Point Boulevard, and on the north by Northern Boulevard. Site Features: The overall BCP site area is an assemblage of parcels, portions of which are contiguous. Some portions of city mapped streets are included in the site as well. Some of the lots are developed with commercial buildings and several are vacant. Current Zoning/Use: The current use of the site is commercial, industrial and vacant areas. The entire project area is zoned C4-4 (commercial) with a Special Willets Point District (WP) overlay. The intended use of the site is for residential and commercial. Historical Use: The area including and surrounding the proposed site is part of a historic tidal wetland and salt meadow area that was filled in with over 50 million cubic yards of incinerator ash and other refuse generated throughout NYC during the first quarter of the 20th century. The dumping ceased in 1932. Since that time, the primary site uses have included a wide variety of automotive-related businesses. These include but are not limited to scrap yards for retail sale of parts, recycling of automotive parts, salvage yards, autobody repair and painting, mechanical repair including all components of passenger cars, commercial vehicle repair, sales of new and used parts, recycling of potential non-automotive parts, battery recycling, commercial vehicle storage, and construction equipment sales. Site Geology and Hydrogeology: The site is situated on a former tidal wetland that was filled in during use as a municipal landfill. The ash fill extends from the immediate surface to a depth of approximately 15-20 feet below surface grade. An organic peat and clay layer is reportedly present beneath the fill material. Groundwater is presumed to flow radially toward Flushing Creek and Flushing Bay. Groundwater has been identified as shallow as several feet below surface grade. Additional geological and hydrogeological details will be determined during the Remedial Investigation.

Env Problem: Nature and Extent of Contamination: There are several suspected sources of contamination impacting the site. The site is known to be underlain by a layer of incinerator ash and other refuse, from the historical use of the site and surrounding area as an ash landfill in the first quarter of the 20th century. From investigations performed in the surrounding area, within the same historical landfill area as Willets Point, this material is generally known to be contaminated with metals at concentrations exceeding soil cleanup objectives for industrial use. Another likely source of contamination is the numerous petroleum spills and hazardous waste releases that have been documented over the years in association with the use of the site for auto body shops and junk yards. A site-wide environmental assessment in 2005 identified petroleum contamination, as indicated by petroleum odors and light non-aqueous phase liquid (LNAPL) in soil borings. Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and several metals including lead, arsenic, barium, and zinc were detected in soil. Petroleum-related VOCs were detected in groundwater at concentrations exceeding groundwater standards. A full remedial investigation is required.

Health Problem: Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised as additional information becomes available.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

C16 DRAGON AUTO CENTER INC.
ENE 131-19 SANFORD AVENUE
1/8-1/4 FLUSHING, NY 11355
0.211 mi.
1116 ft. Site 2 of 3 in cluster C

NY AST A100178367
N/A

Relative:
Higher

AST:

Actual:
18 ft.

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-606173
Program Type: PBS
UTM X: 598428.67059999995
UTM Y: 4512162.2555499999
Expiration Date: 07/03/2011
Site Type: Other

Affiliation Records:

Site Id: 28037
Affiliation Type: Facility Owner
Company Name: DRAGON AUTO CENTER INC.
Contact Type: OWNER
Contact Name: PAUL CHEN
Address1: 131-19 SANFORD AVE.
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 358-9341
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 5/18/2006

Site Id: 28037
Affiliation Type: Mail Contact
Company Name: DRAGON AUTO CENTER INC.
Contact Type: Not reported
Contact Name: PAUL CHEN
Address1: 131-19 SANFORD AVENUE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 358-9341
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 28037
Affiliation Type: On-Site Operator
Company Name: DRAGON AUTO CENTER INC.
Contact Type: Not reported
Contact Name: PAUL CHEN
Address1: Not reported
Address2: Not reported
City: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DRAGON AUTO CENTER INC. (Continued)

A100178367

State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 358-9341
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 28037
Affiliation Type: Emergency Contact
Company Name: DRAGON AUTO CENTER INC.
Contact Type: Not reported
Contact Name: PAUL CHEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 358-9341
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 01
Tank Id: 61040
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G10 - Tank Secondary Containment - Impervious Underlayment
J00 - Dispenser - None
I00 - Overfill - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: TRANSLAT
Last Modified: 03/04/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DRAGON AUTO CENTER INC. (Continued)

A100178367

Material Name: Waste Oil/Used Oil

Tank Number: 02
Tank Id: 61041
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G10 - Tank Secondary Containment - Impervious Underlayment
J00 - Dispenser - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: TRANSLAT
Last Modified: 03/04/2004
Material Name: Waste Oil/Used Oil

C17
ENE
1/8-1/4
0.212 mi.
1117 ft.

13119 SANFORD AVE
FLUSHING, NY 11355
Site 3 of 3 in cluster C

EDR US Hist Auto Stat 1015205238
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: DRAGON GROUP AUTO REPAIR SHOP
Year: 1999
Address: 13119 SANFORD AVE

Actual:
18 ft.

Name: DRAGON GROUP AUTO REPAIR SHOP
Year: 2000
Address: 13119 SANFORD AVE

Name: DRAGON AUTO CTR INC
Year: 2001
Address: 13119 SANFORD AVE

Name: DRAGON AUTO CTR INC
Year: 2002
Address: 13119 SANFORD AVE

Name: DRAGON AUTO CTR INC

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

(Continued)

1015205238

Year: 2003
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CTR INC
 Year: 2004
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CENTER INC
 Year: 2005
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CENTER INC
 Year: 2006
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CENTER INC
 Year: 2008
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CTR
 Year: 2010
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CENTER INC
 Year: 2011
 Address: 13119 SANFORD AVE

Name: DRAGON AUTO CENTER INC
 Year: 2012
 Address: 13119 SANFORD AVE

D18
NNW
1/8-1/4
0.213 mi.
1127 ft.

N&A AUTO REP. INC D/B/A H&M AUTO REPAIR
126-26 WILLETS POINT BLVD.
CORONA, NY 11368

NY HIST UST **U003790843**
N/A

Site 5 of 8 in cluster D

Relative:
Higher

HIST UST:
 PBS Number: 2-605926
 SPDES Number: Not reported
 Emergency Contact: MOHEB ULLAH
 Emergency Telephone: (718) 205-1002
 Operator: MOHEB ULLAH
 Operator Telephone: (718) 205-1002
 Owner Name: MOHEB ULLAH
 Owner Address: 153-52 77TH ROAD
 Owner City,St,Zip: FLUSHING, NY 11367
 Owner Telephone: (718) 268-9052
 Owner Type: Corporate/Commercial
 Owner Subtype: Not reported
 Mailing Name: N&A AUTO REP. INC
 Mailing Address: D/B/A H&H AUTO REPAIR
 Mailing Address 2: 126-26 WILLETS POINT BLVD.
 Mailing City,St,Zip: CORONA, NY 11368
 Mailing Contact: MOHEB ULLAH
 Mailing Telephone: (718) 205-1002
 Owner Mark: First Owner
 Facility Status: 4 - Subpart 360-14 only (active)

Actual:
9 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

N&A AUTO REP. INC D/B/A H&M AUTO REPAIR (Continued)

U003790843

Facility Addr2: Not reported
SWIS ID: 6301
Old PBS Number: Not reported
Facility Type: OTHER
Inspected Date: Not reported
Inspector: Not reported
Inspection Result: Not reported
Federal ID: Not reported
Certification Flag: False
Certification Date: 06/01/2001
Expiration Date: 05/31/2006
Renew Flag: False
Renewal Date: Not reported
Total Capacity: 200
FAMT: True
Facility Screen: No Missing Data
Owner Screen: No Missing Data
Tank Screen: Minor Data Missing
Dead Letter: False
CBS Number: Not reported
Town or City: NEW YORK CITY
County Code: 63
Town or City: 01
Region: 2

Tank Id: 01
Tank Location: UNDERGROUND
Tank Status: In Service
Install Date: Not reported
Capacity (gals): 200
Product Stored: USED OIL
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Not reported
Leak Detection: Not reported
Overfill Prot: Not reported
Dispenser: Not reported
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: Not reported
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

D19
NW
1/8-1/4
0.214 mi.
1129 ft.

CASEY STENGEL BUS DEPOT
123-53 WILLETS POINT BOULEVARD
FLUSHING, NY 11368

NY UST U004062231
N/A

Site 6 of 8 in cluster D

Relative:
Higher

UST:

Actual:
9 ft.

Id/Status: 2-190268 / Active
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 06/05/2017
UTM X: 597645.29079
UTM Y: 4512286.7862299997
Site Type: Trucking/Transportation/Fleet Operation

Affiliation Records:

Site Id: 5861
Affiliation Type: Facility Owner
Company Name: NYC TRANSIT AUTHORITY
Contact Type: MANAGER (ACTING)
Contact Name: SHERRY BULKLEY
Address1: 2 BROADWAY
Address2: Not reported
City: NEW YORK
State: NY
Zip Code: 10004
Country Code: 001
Phone: (646) 252-5777
EMail: Not reported
Fax Number: Not reported
Modified By: MXAJOKU
Date Last Modified: 7/12/2013

Site Id: 5861
Affiliation Type: Mail Contact
Company Name: NYC TRANSIT AUTHORITY
Contact Type: Not reported
Contact Name: SHERRY BULKLEY
Address1: 2 BROADWAY
Address2: 27TH FLOOR
City: NEW YORK
State: NY
Zip Code: 10004
Country Code: 001
Phone: (646) 252-5777
EMail: SHERRY BULKLEY@NYCT.COM
Fax Number: Not reported
Modified By: KAKYER
Date Last Modified: 6/26/2012

Site Id: 5861
Affiliation Type: On-Site Operator
Company Name: CASEY STENGEL BUS DEPOT
Contact Type: Not reported
Contact Name: NYC TRANSIT AUTHORITY
Address1: Not reported
Address2: Not reported
City: Not reported
State: NY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Zip Code: Not reported
Country Code: 001
Phone: (718) 760-8918
EMail: Not reported
Fax Number: Not reported
Modified By: EXROSSAN
Date Last Modified: 6/1/2005

Site Id: 5861
Affiliation Type: Emergency Contact
Company Name: NYC TRANSIT AUTHORITY
Contact Type: Not reported
Contact Name: SHERRY BULKLEY
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (646) 252-5777
EMail: Not reported
Fax Number: Not reported
Modified By: LXZIELIN
Date Last Modified: 8/26/2013

Tank Info:

Tank Number: 001
Tank ID: 6718
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 10000
Install Date: 12/01/1983
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Tank Number: 002
Tank ID: 6719
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 10000
Install Date: 12/01/1983
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 003
Tank ID: 6720
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 10000
Install Date: 12/01/1983
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 010
Tank ID: 6727
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91
Capacity Gallons: 4500
Install Date: 12/01/1950
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 012
Tank ID: 6729
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 1000
Install Date: 12/01/1950
Date Tank Closed: 12/01/1990
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 013
Tank ID: 6730
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: 12/01/1950
Date Tank Closed: 12/01/1990
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G03 - Tank Secondary Containment - Vault (w/o access)
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 014
Tank ID: 6731
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: 12/01/1950
Date Tank Closed: 12/01/1990
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G03 - Tank Secondary Containment - Vault (w/o access)
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 015
Tank ID: 6732
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: 12/01/1950
Date Tank Closed: 12/01/1990
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G03 - Tank Secondary Containment - Vault (w/o access)
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 017
Tank ID: 6734
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: 12/01/1950
Date Tank Closed: 12/01/1990

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G03 - Tank Secondary Containment - Vault (w/o access)
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 100
Tank ID: 49493
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 101

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Tank ID: 49494
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 102
Tank ID: 49495
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 103
Tank ID: 49496
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 104
Tank ID: 49497
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 105
Tank ID: 49498
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 106
Tank ID: 49499
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 107
Tank ID: 49500
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 108
Tank ID: 49501
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: 109
Tank ID: 49502
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: 10/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: CSG-1
Tank ID: 45220
Tank Status: Closed - In Place

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Material Name: Closed - In Place
Capacity Gallons: 4000
Install Date: 02/01/1998
Date Tank Closed: 02/01/1998
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: ZZ
Date Test: 06/01/1989
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron
J01 - Dispenser - Pressurized Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F02 - Pipe External Protection - Original Sacrificial Anode
G03 - Tank Secondary Containment - Vault (w/o access)
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: CSG-13
Tank ID: 45243
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 1000
Install Date: 02/01/1998
Date Tank Closed: 02/01/1998
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0013
Common Name of Substance: Lube Oil

Tightness Test Method: ZZ
Date Test: 08/01/1991
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

J02 - Dispenser - Suction Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
G03 - Tank Secondary Containment - Vault (w/o access)
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

I02 - Overfill - High Level Alarm
B04 - Tank External Protection - Fiberglass
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: CSG-2
Tank ID: 45221
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 2500
Install Date: 02/01/1998
Date Tank Closed: 02/01/1998
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0013
Common Name of Substance: Lube Oil

Tightness Test Method: ZZ
Date Test: 06/01/1989
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F02 - Pipe External Protection - Original Sacrificial Anode
G03 - Tank Secondary Containment - Vault (w/o access)
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser

Tank Number: CSG-5
Tank ID: 45230
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: 02/01/1998
Date Tank Closed: 02/01/1998
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: ZZ
Date Test: 06/01/1989
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Last Modified: 03/04/2004

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
B04 - Tank External Protection - Fiberglass
F01 - Pipe External Protection - Painted/Asphalt Coating
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: CSG-9
Tank ID: 45234
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 1000
Install Date: 02/01/1998
Date Tank Closed: 02/01/1998
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: ZZ
Date Test: 10/01/1991
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

J02 - Dispenser - Suction Dispenser
B04 - Tank External Protection - Fiberglass
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
G03 - Tank Secondary Containment - Vault (w/o access)
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: DSL-1
Tank ID: 54344
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 10000
Install Date: 04/01/1998
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

J01 - Dispenser - Pressurized Dispenser
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: DSL-2
Tank ID: 54345
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 10000
Install Date: 04/01/1998
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

J01 - Dispenser - Pressurized Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: DSL-3
Tank ID: 54346
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 10000
Install Date: 04/01/1998
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

J01 - Dispenser - Pressurized Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: DSL-4
Tank ID: 54347
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 10000
Install Date: 04/01/1998
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
J01 - Dispenser - Pressurized Dispenser
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: FO1
Tank ID: 228203
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 04/03/2009
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 04/29/2009

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J00 - Dispenser - None
I00 - Overfill - None
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None
K00 - Spill Prevention - None

Tank Number: FO2
Tank ID: 228204

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENDEL BUS DEPOT (Continued)

U004062231

Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 04/03/2009
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 04/29/2009

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J00 - Dispenser - None
I00 - Overfill - None
L00 - Piping Leak Detection - None
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None
K00 - Spill Prevention - None

Tank Number: GAS-1
Tank ID: 53577
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 4000
Install Date: 01/01/1998
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 2712
Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

D02 - Pipe Type - Galvanized Steel
J01 - Dispenser - Pressurized Dispenser
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

- H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
- I02 - Overfill - High Level Alarm
- K01 - Spill Prevention - Catch Basin
- B04 - Tank External Protection - Fiberglass
- E04 - Piping Secondary Containment - Double-Walled (Underground)
- L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
- C03 - Pipe Location - Aboveground/Underground Combination
- F01 - Pipe External Protection - Painted/Asphalt Coating
- G04 - Tank Secondary Containment - Double-Walled (Underground)
- I03 - Overfill - Automatic Shut-Off
- L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: H/O-1M
Tank ID: 45232
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 4000
Install Date: 11/01/1991
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 05/07/2007

Equipment Records:

- A03 - Tank Internal Protection - Fiberglass Liner (FRP)
- C02 - Pipe Location - Underground/On-ground
- F04 - Pipe External Protection - Fiberglass
- H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
- I02 - Overfill - High Level Alarm
- K01 - Spill Prevention - Catch Basin
- J02 - Dispenser - Suction Dispenser
- L09 - Piping Leak Detection - Exempt Suction Piping
- B04 - Tank External Protection - Fiberglass
- E04 - Piping Secondary Containment - Double-Walled (Underground)
- D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
- G04 - Tank Secondary Containment - Double-Walled (Underground)
- I03 - Overfill - Automatic Shut-Off

Tank Number: H/O-1T
Tank ID: 45228
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Tank Type: Equivalent technology
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: ZZ
Date Test: 06/01/1989
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 05/07/2007

Equipment Records:

B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin

Tank Number: H/O-2T
Tank ID: 45229
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 4000
Install Date: 01/01/1989
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: ZZ
Date Test: 06/01/1989
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 05/07/2007

Equipment Records:

J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

Tank Number: H/O2M
Tank ID: 45233
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 4000
Install Date: Not reported
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: ZZ
Date Test: 10/01/1991
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 05/07/2007

Equipment Records:

B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin

Tank Number: W/O-1
Tank ID: 45240
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 1000
Install Date: 05/01/1991
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Tightness Test Method: ZZ
Date Test: 08/01/1991
Next Test Date: Not reported
Pipe Model: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
J00 - Dispenser - None
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: W/O-2
Tank ID: 45241
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 1000
Install Date: 05/01/1991
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Tightness Test Method: ZZ
Date Test: 08/01/1991
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

J00 - Dispenser - None
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)

Tank Number: W/O-3
Tank ID: 45242
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 1000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL BUS DEPOT (Continued)

U004062231

Install Date: 05/01/1991
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Tightness Test Method: ZZ
Date Test: 08/01/1991
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: KAKYER
Last Modified: 06/26/2012

Equipment Records:

B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
J00 - Dispenser - None
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin

D20
NW
1/8-1/4
0.216 mi.
1143 ft.

TAP AUTO REPAIR INC.
125-58 WILLETS POINT BLVD.
CORONA, NY 11368

NY AST **A100296247**
N/A

Site 7 of 8 in cluster D

Relative:
Higher

AST:
Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-608092
Program Type: PBS
UTM X: 597709.16194000002
UTM Y: 4512462.7188499998
Expiration Date: 10/24/2007
Site Type: Other

Actual:
9 ft.

Affiliation Records:
Site Id: 29944
Affiliation Type: Facility Owner
Company Name: TAP AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: Not reported
Address1: 126-58 WILLETS POINT BLVD.
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 205-4224

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TAP AUTO REPAIR INC. (Continued)

A100296247

EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29944
Affiliation Type: Mail Contact
Company Name: TAP AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: MOHAMMAD S. ABASI
Address1: 126-58 WILLETS POINT BLVD.
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 205-4224
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29944
Affiliation Type: On-Site Operator
Company Name: TAP AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: MOHAMMAD S. ABASI
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 205-4224
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29944
Affiliation Type: Emergency Contact
Company Name: TAP AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: MOHAMMAD S. ABASI
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 205-4224
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TAP AUTO REPAIR INC. (Continued)

A100296247

Tank Info:

Tank Number: 001
Tank Id: 64421
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G10 - Tank Secondary Containment - Impervious Underlayment
J00 - Dispenser - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: TRANSLAT
Last Modified: 03/04/2004
Material Name: Waste Oil/Used Oil

21
East
1/8-1/4
0.222 mi.
1171 ft.

131-33 AVERY AVE/QUEENS
131-33 AVERY AVENUE
NEW YORK CITY, NY

NY LTANKS S100145743
N/A

Relative:
Higher

LTANKS:

Site ID: 167356
Spill Number/Closed Date: 8908808 / 1/25/2013
Spill Date: 12/6/1989
Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates a file or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: HRPATEL
Referred To: Not reported
Reported to Dept: 12/6/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False

Actual:
19 ft.

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

131-33 AVERY AVE/QUEENS (Continued)

S100145743

UST Involvement: True
 Remediation Phase: 0
 Date Entered In Computer: 1/24/1990
 Spill Record Last Update: 1/25/2013
 Spiller Name: Not reported
 Spiller Company: AMERICAN BADARIES
 Spiller Address: 131-33 AVERY AVENUE
 Spiller City,St,Zip: QUEENS, NY
 Spiller County: 001
 Spiller Contact: Not reported
 Spiller Phone: Not reported
 Spiller Extention: Not reported
 DEC Region: 2
 DER Facility ID: 141005
 DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL C"TRANSFERED FROM TOMASELLO TO TIBBE ON 5/17/01.TRANSFERRED FROM TIBBE TO ROMMEL 04/12/0412/11/12- Zhune called Tom Gallagher- Employee of Home Depot. Title Senior Real State Manager I could not get him. Left message. Home Depot 410-804-504312/13/12- Tom called back. He said he is going to call the Corporate office to find out who I have to call.12/19/12- Tom called. He said the name of the store is 1214 Flushing NY.Debbie Straw from legal Department has to go into Archive to open the file for this store. She will need couple of weeks to get the file. he asked me to give her a call after new year by January 7, 2013. She have to do research in the file to see how can help with this. Debbie Straw
 770-384-3364debbie_straw@homedepot.com 12/27/12-Hiralkumar Patel. after discussing with DEC Austin, case transferred from DEC Zhune to DEC Patel due to on-going investigation at adjacent property located at 41-06 Delong Street (spill #: 9214470).DEC Zhune spoke with Mr. Gallagher at Home Depot regarding spill cleanup documents for 131-33 Avery Ave. she was referred to Debbie Straw in home depot legal department. Ms. Straw is out of office until 01/07/13. DEC Zhune will contact Ms. Straw.Debbie StrawPh. (770) 384-3364email: debbie_straw@homedepot.com 01/11/13-Hiralkumar Patel.9:58 AM:- left message for Ms. Straw at Home Depot.4:35 PM:- received call from Ms. Straw. she does not know anything about open spill case at Home Depot property. she will contact Clinton Cole, their environmental council who might have copy of all environmetal documents for the site.Clinton Taw ColeHartman, Simons & Wood LLP.environmental councilPh. (770) 303-8450Fax (770) 933-7310email: clinton.cole@hartmansimons.com01/15/13-Hiralkumar Patel.1:49 PM:- received call from Mr. Cole, council for Home Depot. asked him to submit all available documents related to environmental work done on Home Depot property.2:05 PM:- sent email to Mr. Cole and asked for copies of all environmental documents for home depot property.01/18/13-Hiralkumar Patel.10:37 AM:- spoke with Mr. Cole regarding environmental documents. he has some documents and waiting for other older documents. asked him to submit whatever he has for review and rest, once available. Mr. Cole will submit available documents today.01/22/13-Hiralkumar Patel. received email from Mr. Cole (at 7:46 PM on 01/18/13) including reports for Home Depot property.01/24/13-Hiralkumar Patel.11:12 AM:- received email from Mr. Cole including additional report.01/25/13-Hiralkumar Patel. reviewed reports sent by Mr. Cole.

 *****1) 04/24/1995: Report of Soil Sampling

MAP FINDINGS

131-33 AVERY AVE/QUEENS (Continued)

S100145743

Related to UST Removal:- Home Depot purchased the former Taystee Baking facility <----- removed six USTs (PBS #: 2-335894) from two areas <----- Area 1 included four 4,000 gal USTs that were located outside the vehicle maintenance shop in the norther portion of the site <----- three 4,000 gal tanks were in use with two containing diesel and one gasoline- the fourth gasoline tank which reportedly failed a tightness test in 1990 was subsequently closed in place and filled with concrete- two fuel dispensers were also located in this area 1- Area 2 included two 30,000 gal #6 fuel oil (product type as per tank removal affidavit from ABC Tank) USTs that were located in the basement level of the building, in the south-central portion of the site <----- each 30,000 tanks were accessible by first floor manholes in the storage room on the south side of the building- Breeze Demolition removed three USTs from Area 1 from the pit at the fuel island prior to LAW's site visit on 09/22/1994 <----- diesel/gasoline USTs were located on concrete slab- excavation in Area 1 was 45 ft by 45 ft by 14 ft deep <-----apparent groundwater was observed at the bottom of the excavation in Area 1 <----- an abandoned monitoring well MW-1 was exposed and removed from the west wall and a catch basin and some associated piping were removed at the south end of the east wall- at the end of excavation, found PID readings of 28 ppm in pit bottom, 83 ppm in north sidewall and 117 ppm in east sidewall- five composite soil samples (CSE, CSW, CSS, CSN and CSB), representing each of the walls and bottom of the excavation were collected- the groundwater encountered within the excavation had a hydrocarbon sheen, but no free product was observed- monitoring well MW-1 which had been previously installed near the former fuel island USTs and used for an earlier round of assessment at the site did not exhibit free product during its monitoring period in 1993, prior to tank removal <----- excavation in Area 2 was 35 ft wide by 50 ft long and 15 ft deep <----- three soil samples (FO-1, FO-2 and FO-3)) were obtained from Area 2: FO-1 was composite sample from northwest wall at tank bottom level, FO-2 was composite sample from the bottom of the southeast wall and FO-3 was a grab sample from the southeast corner that appeared to be hydrocarbon stained (6 ppm on PID)- endpoint samples were analyzed via TCLP methods- no contamination noted in endpoint samples from Area 1 or Area 2) 05/16/1997: Response to DEC letter dated 05/07/1997:- information from report dated 06/04/1993, prepared by Law Engineering and Environmental Services (this report is not available for review)- limited contamination assessment included installation of 22 soil borings, six of which were converted to groundwater monitoring wells (B-1, B-2, B-3/MW-1, B-4, B-5, B-6, B-10/MW-3, B-22/MW-5, B-101/MW-6, B-102, B-103/MW-7, B-104/MW-8, B-11, B-12, B-13, B-14, B-15, B-16, B-17, MW-13, HA-1 and HA-2)- nine soil borings (B-1, B-2, B-3/MW-1, B-4, B-5, B-6, B-101/MW-6, B-102 and B-103/MW-7) in the vicinity of the UST, three of which were converted to wells- eight soil borings (B-11, B-12, B-13, B-14, B-15, B-16, B-17 and B-104/MW-8) in the vicinity of the two 30,000 gal #6 USTs, one of which was converted to well- soil borings were drilled to depths of 2.5 to 25 ft- soil encountered on-site consisted of sand, silt and clay fills to a general depth of 8 to 10 ft and virgin sandy soils from 10 to 25 ft <----- soil samples were scanned with a flame ionization detector (FID)- no FID readings noted in borings B-1, B-10/MW-3, B-22/MW-5, B-101/MW-6, B-11, B-12 and B-13- less than 4 ppm recorded on FID in borings B-4, B-5, B-6, B-104/MW-8, B-14, B-15, B-16, B-17

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-33 AVERY AVE/QUEENS (Continued)

S100145743

and MW-13- found higher FID readings in three borings: 990 ppm at 15 ft in B-2 (0.6 ppm at 20 ft in B-2), more than 1,000 ppm at 10 ft in B-2/MW-1 (2.4 ppm at 15 ft and ND at 20 ft in B-3) and 50 ppm at 5 ft in B-103/MW-7 (25 ppm at 10 ft and ND at 15 ft in B-103)- collected total 18 soil samples: one each from borings B-1, B-2, B-3/MW-1, B-4, B-5, B-6, B-101/MW-6, B-102, B-103/MW-7, B-104/MW-8, B-11, B-12, B-14, B-15, B-16, B-17, B-22/MW-5 and MW-13- samples from B-1, B-2, B-3/MW-1, B-4, B-5, B-6, B-101/MW-6, B-102 and B-103/MW-7 were analyzed for TPH and BTEX <----- samples from B-104/MW-8, B-11, B-12, B-14, B-15, B-16, B-17, B-22/MW-5 and MW-13 were analyzed for TPH only- 2 inch wells installed in borings with 15 ft of screen (as per boring/well logs)- well installed to 20 ft at B-3/MW-1, to 25 ft at B-22/MW-5, to 25 ft at B-101/MW-6, to 25 ft at B-103/MW-7, to 24 ft at M-104/MW-8, to 19.5 ft at MW-13 (report is missing logs for boring B-10/MW-3) <----- collected groundwater samples from MW-1, MW-3, MW-5, MW-6, MW-7, MW-8 and MW-13- found 22 ppb of Benzene and 13 ppb of Xylene in groundwater sample from well MW-1 only- no contamination in groundwater samples from other wells- groundwater found between 13.58 and 18.88 ft bg <----- groundwater flow on-site is interpreted to be generally toward the west or southwest <----- groundwater elevations are below mean sea level, this could be result of groundwater pumping in area <-----3) 06/29/1999: Groundwater Investigation:- this groundwater study was performed in accordance with a work plan approved by DEC dated 01/19/99- the overall purpose of this groundwater study was to identify the likely source of the groundwater contamination on the north-adjacent property (41-06 DeLong Street); specifically, due to presence of floating product in well MW-102 on adjacent property- installed three 2-inch wells (MW-1A, MW-2A and MW-3A)- well MW-1A and MW-2A were installed to 28 ft bg and well MW-3A was installed to 27 ft bg- all three wells installed with 10 ft of screen- well MW-1A corresponds approx. to the former location of four 4,000 gal diesel/gasoline USTs- well MW-2A was placed as close as possible to the north-adjacent property well MW-102- well MW-3A was installed at the northwest end of the site- no evidence of floating free product was observed in any wells on Home Depot property- found product in well MW-102 on north-adjacent property- found only MTBE (max. 12 ppb in MW-1A)- no other VOCs or SVOCs found in groundwater samples from wells on Home Depot property- all wells on Home Depot site and wells MW-102, FW-2, FW-3, FW-4 and MW-100 on the north-adjacent property were surveyed to the same benchmark- direction of groundwater flow is to the south- groundwater elevations of all wells were well below sea level probably because of de-watering that has occurred less than 1,000 ft to the south of Home Depot property- as per permit record, NYC DEP was constructing a combined sewer overflow holding and treatment system and DEP was allowed to pump 950,000 gal of groundwater per day <----- based upon surface topography and groundwater contour map, the expected direction of groundwater flow would be to the west, towards Flushgin Creek <----- ***** after discussing with DEC Austin, case closed based on available information.4:14 PM:- received email from Mr. Cole including contact information for person who gets the closure letter.Home Depot U.S.A., Inc.Real Estate Law2455 Paces Ferry Rd, Building C-20Atlanta, GA 30339Attn: Jennifer M. Evans, Sr. Attorney4:28 PM:- sent spill closure letter to Ms. Evans. letter emailed to Mr. Cole.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

131-33 AVERY AVE/QUEENS (Continued)

S100145743

Remarks: (4) 4K TANKS WERE TESTED, (1) GASOLINE, (3) DIESEL, UNKNOWN LEAK RATE FOR GASOLINE TANK, (3) DIESEL TANKS HAD A LEAK RATE OF .24663GPH, WILLUNCOVER & FIND LEAK, NYCFD ON SCENE.

Material:
Site ID: 167356
Operable Unit ID: 936072
Operable Unit: 01
Material ID: 441997
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:
Site ID: 167356
Spill Tank Test: 1536528
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

F22
ENE
1/8-1/4
0.223 mi.
1177 ft.

CRYSTAL WINDOWS
131-40 MAPLE AVE
FLUSHING, NY 11355
Site 1 of 8 in cluster F

NY UST U004046476
N/A

Relative:
Higher

Actual:
21 ft.

UST:
Id/Status: 2-607772 / Unregulated/Closed
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 05/15/2007
UTM X: 598453.34362000006
UTM Y: 4512046.44838
Site Type: Other

Affiliation Records:
Site Id: 29624
Affiliation Type: Facility Owner
Company Name: SOIEFER REATLY CORP
Contact Type: Not reported
Contact Name: Not reported
Address1: 100 N. VILLAGE AVE #37
Address2: Not reported
City: ROCVILLE CENTRE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CRYSTAL WINDOWS (Continued)

U004046476

State: NY
Zip Code: 11570
Country Code: 001
Phone: (516) 766-1188
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29624
Affiliation Type: Mail Contact
Company Name: SOIEFER REALTY CORP
Contact Type: Not reported
Contact Name: STEVE LEFFLER
Address1: 100 N VILLAGE AVE
Address2: #37
City: ROCKVILLE CENTRE
State: NY
Zip Code: 11570
Country Code: 001
Phone: (516) 766-1188
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29624
Affiliation Type: On-Site Operator
Company Name: CRYSTAL WINDOWS
Contact Type: Not reported
Contact Name: HUGO SERONE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 461-7000
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29624
Affiliation Type: Emergency Contact
Company Name: SOIEFER REATLY CORP
Contact Type: Not reported
Contact Name: HUGO SERONE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 461-7000
EMail: Not reported
Fax Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CRYSTAL WINDOWS (Continued)

U004046476

Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 1
Tank ID: 63486
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 3000
Install Date: Not reported
Date Tank Closed: 06/12/2002
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: 21
Date Test: 04/17/2002
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser

F23
ENE
1/8-1/4
0.223 mi.
1177 ft.

CON EDISION - VS#513
BI-10, MARTEL AVE BI-10, MARTE
NEW YORK, NY 10003

RCRA NonGen / NLR 1007208020
NY MANIFEST NYP004080503

Site 2 of 8 in cluster F

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 06/02/2002
Facility name: CON EDISION - VS#513
Facility address: BI-10, MARTEL AVE BI-10, MARTE
NEW YORK, NY 10003
EPA ID: NYP004080503
Mailing address: IRVING PLACE
NEW YORK, NY 10003
Contact: ANTHONY DRUMMINGS
Contact address: IRVING PLACE
NEW YORK, NY 10003
Contact country: US
Contact telephone: (212) 460-3770
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator

Actual:
21 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CON EDISION - VS#513 (Continued)

1007208020

Description: Handler: Non-Generators do not presently generate hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 06/01/2002
Site name: CON EDISION - VS#513
Classification: Not a generator, verified

Date form received by agency: 05/31/2002
Site name: CON EDISION - VS#513
Classification: Large Quantity Generator

Violation Status: No violations found

NY MANIFEST:

EPA ID: NYP004080503
Country: USA

Mailing Info:

Name: CONSOLIDATED EDISON
Contact: FRANKLIN MURRAY
Address: 4 IRVING PLACE RM 828
City/State/Zip: NEW YORK, NY 10003
Country: USA
Phone: 212-460-2808

Manifest:

Document ID: NYE0759942
Manifest Status: Not reported
Trans1 State ID: GX3216
Trans2 State ID: Not reported
Generator Ship Date: 04/22/2001
Trans1 Recv Date: 04/22/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/22/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004080503
Trans1 EPA ID: NYD006982359
Trans2 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CON EDISION - VS#513 (Continued)

1007208020

TSDF ID: NYD980593636
Waste Code: B002 - PETROLEUM OIL WITH 50 BUT < 500 PPM PCB
Quantity: 01414
Units: P - Pounds
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

D24
NW
1/8-1/4
0.227 mi.
1200 ft.

CON EDISON
126-09 WILLETS POINT BLVD
FLUSHING, NY 11358
Site 8 of 8 in cluster D

NY MANIFEST S113494486
N/A

Relative:
Higher

NY MANIFEST:
EPA ID: NYP004255436
Country: USA

Actual:
9 ft.

Mailing Info:
Name: CON EDISON
Contact: CON EDISON
Address: 4 IRVING PLACE 15TH FLOOR
City/State/Zip: NEW YORK, NY 10003
Country: USA
Phone: Not reported

Manifest:

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Trans2 State ID: Not reported
Generator Ship Date: 06/19/2012
Trans1 Recv Date: 06/22/2012
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/23/2012
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004255436
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: NJD002200046
Waste Code: Not reported
Quantity: 2009.0
Units: K - Kilograms (2.2 pounds)
Number of Containers: 1.0
Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 009204513JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CON EDISON (Continued)

S113494486

Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

F25
ENE
1/8-1/4
0.230 mi.
1217 ft.

POWER PLUS INC.
131-29 SANFORD AVENUE
FLUSHING, NY 11355

NY AST A100295577
N/A

Site 3 of 8 in cluster F

Relative:
Higher

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-609371
Program Type: PBS
UTM X: 598435.7750999997
UTM Y: 4512167.6793099996
Expiration Date: 11/25/2013
Site Type: Auto Service/Repair (No Gasoline Sales)

Actual:
19 ft.

Affiliation Records:

Site Id: 31215
Affiliation Type: Facility Owner
Company Name: JMG AUTO REPAIR INC
Contact Type: AGENT
Contact Name: JIM ZHAIS
Address1: 131-29 SANFORD AVENUE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 463-7690
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 7/24/2009

Site Id: 31215
Affiliation Type: Mail Contact
Company Name: JMG AUTO REPAIR INC
Contact Type: Not reported
Contact Name: JIM ZHAIS
Address1: 131-29 SANFORD AVENUE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (917) 554-4767
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 7/24/2009

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

POWER PLUS INC. (Continued)

A100295577

Site Id: 31215
Affiliation Type: On-Site Operator
Company Name: POWER PLUS INC.
Contact Type: Not reported
Contact Name: JIM ZHAIS
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (917) 554-4767
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 7/24/2009

Site Id: 31215
Affiliation Type: Emergency Contact
Company Name: JMG AUTO REPAIR INC
Contact Type: Not reported
Contact Name: JIM ZHAIS
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (917) 554-4767
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 7/24/2009

Tank Info:

Tank Number: 001
Tank Id: 67248
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G00 - Tank Secondary Containment - None
J00 - Dispenser - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/20/1999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

POWER PLUS INC. (Continued)

A100295577

Capacity Gallons: 250
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: MSBAPTIS
Last Modified: 07/24/2009
Material Name: Waste Oil/Used Oil

G26
ENE
1/8-1/4
0.232 mi.
1224 ft.

4147 FULLER PL
FLUSHING, NY 11355
Site 1 of 8 in cluster G

EDR US Hist Auto Stat 1015482313
N/A

Relative: EDR Historical Auto Stations:
Higher Name: POWER TECH AUTO REPAIR INC
Year: 2004
Actual: Address: 4147 FULLER PL
18 ft.

H27
WNW
1/8-1/4
0.232 mi.
1225 ft.

FLUSHING MEADOWS PARK
123-30 ROOSEVELT AVE
FLUSHING, NY
Site 1 of 3 in cluster H

NY LTANKS S109374806
N/A

Relative: LTANKS:
Higher Site ID: 404612
Spill Number/Closed Date: 0807272 / 10/12/2010
Actual: Spill Date: 9/29/2008
10 ft. Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: LXZIELIN
Referred To: Not reported
Reported to Dept: 9/29/2008
CID: Not reported
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 9/29/2008
Spill Record Last Update: 10/12/2010
Spiller Name: KALEEM KAMBOJ
Spiller Company: FLUSHING MEADOWS PARK
Spiller Address: 123-30 ROOSEVELT AVE
Spiller City,St,Zip: FLUSHING, NY
Spiller County: 999
Spiller Contact: KALEEM KAMBOJ

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING MEADOWS PARK (Continued)

S109374806

Spiller Phone: (212) 410-8969
Spiller Extension: Not reported
DEC Region: 2
DER Facility ID: 353886
DEC Memo: 10-12-10 - LZThe spill case has been consolidated with spill# 0813296 that deals with another tank tightness test failure at this same facility (PBS # 600316). Both tanks were located next to each other. See Tank closure report dated June 21, 2010 (eDocs). The spill case is closed. Sangesland spoke to Bob Laga at Franklin Company. He said the tank failed. The tank was "locked down" and city parks dept was going to slowly use the gasoline in the tank, but not fill it back up. TTF Letter sent to: Mr. Gabriel Ramos City of New York - Parks & Recreation Dept. 5 Boroughs Operations Randalls Island, NY 10035
Remarks: Caller states they had a failure on a 2000 gallon tank from a EZ locator test. No spill at this time.

Material:
Site ID: 404612
Operable Unit ID: 1161259
Operable Unit: 01
Material ID: 2152454
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

H28
WNW
1/8-1/4
0.232 mi.
1225 ft.

USTA NATIONAL TENNIS CENTER INC
123-30 ROOSEVELT AVE
FLUSHING, NY 11368
Site 2 of 3 in cluster H

RCRA NonGen / NLR 1000871748
FINDS NY0000094961
NY MANIFEST

Relative:
Higher

RCRA NonGen / NLR:
Date form received by agency: 01/01/2007
Facility name: USTA NATIONAL TENNIS CENTER INC
Facility address: 123-30 ROOSEVELT AVE
FLUSHING MEADOW PARK
FLUSHING, NY 113681600
EPA ID: NY0000094961
Mailing address: ROOSEVELT AVE
FLUSHING MEADOW PARK
FLUSHING, NY 11368
Contact: Not reported
Contact address: ROOSEVELT AVE
FLUSHING, NY 11368
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02

Actual:
10 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

USTA NATIONAL TENNIS CENTER INC (Continued)

1000871748

Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: UNITED STATES TENNIS ASSN
Owner/operator address: 123-30 ROOSEVELT AVE
FLUSHING, NY 11368
Owner/operator country: US
Owner/operator telephone: (718) 592-8000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: UNITED STATES TENNIS ASSN
Owner/operator address: 123-30 ROOSEVELT AVE
FLUSHING, NY 11368
Owner/operator country: US
Owner/operator telephone: (718) 592-8000
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: USTA NATIONAL TENNIS CENTER INC
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Site name: USTA NATIONAL TENNIS CENTER INC
Classification: Not a generator, verified

Date form received by agency: 01/11/1994
Site name: USTA NATIONAL TENNIS CENTER INC
Classification: Large Quantity Generator

. Waste code: X002
. Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

USTA NATIONAL TENNIS CENTER INC (Continued)

1000871748

Violation Status: No violations found

FINDS:

Registry ID: 110004311058

Environmental Interest/Information System

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

NY MANIFEST:

EPA ID: NY0000094961
Country: USA

Mailing Info:

Name: USTA NATIONAL TENNIS CENTER
Contact: DAVID MEEHAN
Address: 123-30 ROOSEVELT AVE
City/State/Zip: FLUSHING MEADOW PARK, NY 11368
Country: USA
Phone: 718-592-8000

Manifest:

Document ID: NYB5471154
Manifest Status: Completed copy
Trans1 State ID: OHT770KC
Trans2 State ID: Not reported
Generator Ship Date: 01/31/1994
Trans1 Recv Date: 01/31/1994
Trans2 Recv Date: / /
TSD Site Recv Date: 02/01/1994
Part A Recv Date: / /
Part B Recv Date: 02/14/1994
Generator EPA ID: NY0000094961
Trans1 EPA ID: OHD981093420
Trans2 EPA ID: Not reported
TSD ID: OHD981093420
Waste Code: B006 - PCB TRANSFORMERS WITH 500 PPM OR > PCB

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

USTA NATIONAL TENNIS CENTER INC (Continued)

1000871748

Quantity: 03086
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: CM - Metal boxes, cases, roll-offs
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Waste Code: B001 - PCB OIL (CONC) FROM TRANS, CAP, ETC
Quantity: 02004
Units: K - Kilograms (2.2 pounds)
Number of Containers: 007
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: B007 - OTHER MISCELLANEOUS PCB WASTES
Quantity: 00005
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 1994

F29
ENE
1/8-1/4
0.232 mi.
1225 ft.

13129 SANFORD AVE
FLUSHING, NY 11355
Site 4 of 8 in cluster F

EDR US Hist Auto Stat 1015205465
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: PLATON AUTO BODY SHOP
Year: 2008

Actual:
19 ft.

Address: 13129 SANFORD AVE

Name: PLATON AUTO BODY SHOP
Year: 2009
Address: 13129 SANFORD AVE

Name: JMG AUTOMOBILE REPAIR INCORPORATED
Year: 2011
Address: 13129 SANFORD AVE

Name: JMG AUTO REPAIR INC
Year: 2012
Address: 13129 SANFORD AVE

G30
ENE
1/8-1/4
0.233 mi.
1232 ft.

TOP GEAR AUTO PERFORMANCE INC.
41-17 FULLER PLACE
FLUSHING, NY 11355
Site 2 of 8 in cluster G

NY AST A100293703
N/A

Relative:
Higher

AST:

Region: STATE
DEC Region: 2

Actual:
17 ft.

Site Status: Active
Facility Id: 2-609382

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOP GEAR AUTO PERFORMANCE INC. (Continued)

A100293703

Program Type: PBS
UTM X: 598329.55096000002
UTM Y: 4512232.1079799999
Expiration Date: 12/04/2013
Site Type: Auto Service/Repair (No Gasoline Sales)

Affiliation Records:

Site Id: 31226
Affiliation Type: Facility Owner
Company Name: DAGOSTINO, SEBASTIANO
Contact Type: OWNER OF THE BUSINESS
Contact Name: STEVEN X. CHEN
Address1: 41-17 FULLER PLACE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (917) 837-5383
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 7/7/2009

Site Id: 31226
Affiliation Type: Mail Contact
Company Name: DAGOSTINO PROPERTY DEVELOPMENT, LLC
Contact Type: Not reported
Contact Name: SEBASTIANO DAGOSTINO
Address1: 51-20 217 ST.
Address2: Not reported
City: BAYSIDE
State: NY
Zip Code: 11364
Country Code: 001
Phone: (718) 225-3438
EMail: SRDAGOSTINO@AOL.COM
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 7/7/2009

Site Id: 31226
Affiliation Type: On-Site Operator
Company Name: TOP GEAR AUTO PERFORMANCE INC.
Contact Type: Not reported
Contact Name: STEVEN X. CHEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 888-0625
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 7/7/2009

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOP GEAR AUTO PERFORMANCE INC. (Continued)

A100293703

Site Id: 31226
Affiliation Type: Emergency Contact
Company Name: DAGOSTINO, SEBASTIANO
Contact Type: Not reported
Contact Name: STEVEN X. CHEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (347) 996-1880
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 7/7/2009

Tank Info:

Tank Number: 001
Tank Id: 67266
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G00 - Tank Secondary Containment - None
J00 - Dispenser - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
K00 - Spill Prevention - None

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 07/01/2001
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: dxliving
Last Modified: 07/07/2009
Material Name: Waste Oil/Used Oil

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

G31 **NYCDEP**
ENE **41-11 FULLER PLACE**
1/8-1/4 **COLLEGE POINT, NY 11356**
0.234 mi.
1234 ft. **Site 3 of 8 in cluster G**

NY MANIFEST **1009235633**
 N/A

Relative: NY MANIFEST:
Higher EPA ID: NYP003661055
 Country: USA

Actual: Mailing Info:
17 ft. Name: NYCDEP
 Contact: N/S
 Address: 41-11 FULLER PLACE
 City/State/Zip: COLLEGE POINT, NY 11356
 Country: USA
 Phone: 718-595-4784

Manifest:

Document ID: NYG2608551
 Manifest Status: Not reported
 Trans1 State ID: PD1011NY
 Trans2 State ID: Not reported
 Generator Ship Date: 08/02/2000
 Trans1 Recv Date: 08/02/2000
 Trans2 Recv Date: Not reported
 TSD Site Recv Date: 08/03/2000
 Part A Recv Date: Not reported
 Part B Recv Date: Not reported
 Generator EPA ID: NYP003661055
 Trans1 EPA ID: NYD077444263
 Trans2 EPA ID: Not reported
 TSDF ID: NYD077444263
 Waste Code: F005 - UNKNOWN
 Quantity: 00020
 Units: G - Gallons (liquids only)* (8.3 pounds)
 Number of Containers: 004
 Container Type: DM - Metal drums, barrels
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 01.00
 Year: 2000

G32 **88 PACE AUTO**
ENE **41-11 FULLER PLACE**
1/8-1/4 **FLUSHING, NY 11355**
0.234 mi.
1234 ft. **Site 4 of 8 in cluster G**

NY AST **A100292839**
 N/A

Relative: AST:
Higher Region: STATE
 DEC Region: 2
Actual: Site Status: Active
17 ft. Facility Id: 2-609117
 Program Type: PBS
 UTM X: 598328.03486999997
 UTM Y: 4512238.1943800002
 Expiration Date: 07/18/2018
 Site Type: Other

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

88 PACE AUTO (Continued)

A100292839

Affiliation Records:
Site Id: 30963
Affiliation Type: Facility Owner
Company Name: MEI TUNG WET WASH CORP
Contact Type: OWNER
Contact Name: JACK SIT
Address1: 28-47 215 ST
Address2: Not reported
City: BAYSIDE
State: NY
Zip Code: 11360
Country Code: 001
Phone: (718) 229-1982
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 6/11/2013

Site Id: 30963
Affiliation Type: Mail Contact
Company Name: 88 PACE AUTO
Contact Type: Not reported
Contact Name: JACK SIT
Address1: 41-11 FULLER PLACE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 886-2550
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 30963
Affiliation Type: On-Site Operator
Company Name: 88 PACE AUTO
Contact Type: Not reported
Contact Name: JACK SIT
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 886-2550
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 30963
Affiliation Type: Emergency Contact
Company Name: JACK SIT
Contact Type: Not reported
Contact Name: JACK SIT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

88 PACE AUTO (Continued)

A100292839

Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 539-1836
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 001
Tank Id: 66485
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G03 - Tank Secondary Containment - Vault (w/o access)
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 07/18/2003
Capacity Gallons: 250
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: MSBAPTIS
Last Modified: 06/11/2013
Material Name: Waste Oil/Used Oil

G33
ENE
1/8-1/4
0.234 mi.
1237 ft.

4117 FULLER PL
FLUSHING, NY 11355
Site 5 of 8 in cluster G

EDR US Hist Auto Stat 1015480311
N/A

Relative:
Higher

EDR Historical Auto Stations:
Name: FULLER AUTO REPAIR INC
Year: 2001

Actual:
17 ft.

Address: 4117 FULLER PL
Name: FULLER AUTO REPAIR INC

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

(Continued)

1015480311

Year: 2002
 Address: 4117 FULLER PL

Name: FULLER AUTO REPAIR INC
 Year: 2003
 Address: 4117 FULLER PL

Name: FULLER AUTO REPAIR INC
 Year: 2006
 Address: 4117 FULLER PL

Name: FULLER AUTO REPAIR INC
 Year: 2007
 Address: 4117 FULLER PL

Name: TOP GEAR AUTO PERFORMANCE INC
 Year: 2010
 Address: 4117 FULLER PL

Name: TOP GEAR AUTO PERFORMANCE INC
 Year: 2011
 Address: 4117 FULLER PL

**F34
 ENE
 1/8-1/4
 0.234 mi.
 1238 ft.**

**G P IRON WORK INC
 131-32 SANFORD AVE
 FLUSHING, NY 11355
 Site 5 of 8 in cluster F**

**RCRA NonGen / NLR 1000287686
 FINDS NYD172875270
 NY MANIFEST**

**Relative:
 Higher**

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
 Facility name: SMALL CAR COLLISION INC
 Facility address: 131-32 SANFORD AVE
 FLUSHING, NY 113554231
 EPA ID: NYD172875270
 Mailing address: SANFORD AVE
 FLUSHING, NY 11355
 Contact: Not reported
 Contact address: SANFORD AVE
 FLUSHING, NY 11355
 Contact country: US
 Contact telephone: Not reported
 Contact email: Not reported
 EPA Region: 02
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ALBERT FELICIONE
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, WY 99999
 Owner/operator country: US
 Owner/operator telephone: (212) 555-1212
 Legal status: Private
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Owner/operator name: ALBERT FELICIONE
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: SMALL CAR COLLISION INC
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Site name: SMALL CAR COLLISION INC
Classification: Not a generator, verified

Date form received by agency: 10/03/1988
Site name: SMALL CAR COLLISION INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE(BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110057668536

Environmental Interest/Information System
OSHA ESTABLISHMENT

Registry ID: 110004385816

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

Registry ID: 110057463864

Environmental Interest/Information System
OSHA ESTABLISHMENT

NY MANIFEST:

EPA ID: NYD172875270
Country: USA

Mailing Info:

Name: SMALL CAR COLLISION INC
Contact: SMALL CAR COLLISION INC
Address: 131-32 SANFORD AVENUE
City/State/Zip: FLUSHING, NY 11355
Country: USA
Phone: 718-445-0070

Manifest:

Document ID: NJA0566113
Manifest Status: Completed copy
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 01/09/1989
Trans1 Recv Date: 01/09/1989

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Trans2 Recv Date: / /
TSD Site Recv Date: 01/10/1989
Part A Recv Date: 01/17/1989
Part B Recv Date: 01/19/1989
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD980787147
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F005 - UNKNOWN
Quantity: 00020
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1989

Document ID: NJA2196877
Manifest Status: Completed copy
Trans1 State ID: 10339
Trans2 State ID: Not reported
Generator Ship Date: 10/24/1995
Trans1 Recv Date: 10/24/1995
Trans2 Recv Date: / /
TSD Site Recv Date: 10/26/1995
Part A Recv Date: 01/02/1996
Part B Recv Date: 11/06/1995
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00140
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1995

Document ID: NJA1009564
Manifest Status: Completed after the designated time period for a TSD ID to get a copy to the DEC
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 05/30/1990
Trans1 Recv Date: 05/30/1990
Trans2 Recv Date: / /
TSD Site Recv Date: 05/30/1990
Part A Recv Date: 07/26/1990
Part B Recv Date: 06/06/1990
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD980787147
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F005 - UNKNOWN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1990

Document ID: NJA0628255
Manifest Status: Completed copy
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 06/26/1989
Trans1 Recv Date: 06/26/1989
Trans2 Recv Date: / /
TSD Site Recv Date: 06/27/1989
Part A Recv Date: 07/03/1989
Part B Recv Date: 07/07/1989
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD980787147
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F005 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1989

Document ID: NJA2062216
Manifest Status: Completed copy
Trans1 State ID: 10339
Trans2 State ID: Not reported
Generator Ship Date: 02/02/1995
Trans1 Recv Date: 02/02/1995
Trans2 Recv Date: / /
TSD Site Recv Date: 02/02/1995
Part A Recv Date: 02/10/1995
Part B Recv Date: 02/14/1995
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1995

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Document ID: NJA1490885
Manifest Status: Completed copy
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 06/29/1992
Trans1 Recv Date: 06/29/1992
Trans2 Recv Date: / /
TSD Site Recv Date: 06/30/1992
Part A Recv Date: / /
Part B Recv Date: 07/10/1992
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1992

Document ID: NJA1159822
Manifest Status: Completed copy
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 06/12/1991
Trans1 Recv Date: 06/12/1991
Trans2 Recv Date: / /
TSD Site Recv Date: 06/13/1991
Part A Recv Date: 06/26/1991
Part B Recv Date: 06/21/1991
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD980787147
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1991

Document ID: NJA0963705
Manifest Status: Completed after the designated time period for a TSD ID to get a copy to the DEC
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 12/06/1990
Trans1 Recv Date: 12/06/1990
Trans2 Recv Date: / /
TSD Site Recv Date: 12/07/1990
Part A Recv Date: 01/22/1991

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Part B Recv Date: 01/15/1991
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD980787147
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00060
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1990

Document ID: NJA1529693
Manifest Status: Completed copy
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 11/30/1992
Trans1 Recv Date: 11/30/1992
Trans2 Recv Date: / /
TSD Site Recv Date: 12/01/1992
Part A Recv Date: 12/09/1992
Part B Recv Date: 12/23/1992
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00050
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1992

Document ID: NJA1987230
Manifest Status: Completed copy
Trans1 State ID: 10339
Trans2 State ID: Not reported
Generator Ship Date: 09/23/1994
Trans1 Recv Date: 09/23/1994
Trans2 Recv Date: / /
TSD Site Recv Date: 09/23/1994
Part A Recv Date: 10/06/1994
Part B Recv Date: 10/05/1994
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1994

Document ID: NJA1886126
Manifest Status: Completed copy
Trans1 State ID: 10339
Trans2 State ID: Not reported
Generator Ship Date: 03/29/1994
Trans1 Recv Date: 03/29/1994
Trans2 Recv Date: / /
TSD Site Recv Date: 03/31/1994
Part A Recv Date: 04/08/1994
Part B Recv Date: 04/12/1994
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1994

Document ID: NJA1248673
Manifest Status: Completed copy
Trans1 State ID: NJDEPS103
Trans2 State ID: Not reported
Generator Ship Date: 12/09/1991
Trans1 Recv Date: 12/09/1991
Trans2 Recv Date: / /
TSD Site Recv Date: 12/10/1991
Part A Recv Date: / /
Part B Recv Date: 12/23/1991
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD986608941
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1991

Document ID: NJA0629410
Manifest Status: Completed copy
Trans1 State ID: 000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G P IRON WORK INC (Continued)

1000287686

Trans2 State ID: 000000000
Generator Ship Date: 12/04/1989
Trans1 Recv Date: 12/04/1989
Trans2 Recv Date: / /
TSD Site Recv Date: 12/05/1989
Part A Recv Date: 12/11/1989
Part B Recv Date: 12/12/1989
Generator EPA ID: NYD172875270
Trans1 EPA ID: NJD980787147
Trans2 EPA ID: Not reported
TSD ID: NJD002454544
Waste Code: F005 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 1989

G35
ENE
1/8-1/4
0.235 mi.
1239 ft.

4113 FULLER PL
FLUSHING, NY 11355

Site 6 of 8 in cluster G

EDR US Hist Auto Stat 1015480130
N/A

Relative:
Higher

EDR Historical Auto Stations:

Actual:
17 ft.

Name: PACE AUTO SERVICE
Year: 2002
Address: 4113 FULLER PL

Name: PACE AUTO SERVICE
Year: 2003
Address: 4113 FULLER PL

Name: PACE AUTO SERVICE
Year: 2004
Address: 4113 FULLER PL

Name: PACE AUTO SERVICE
Year: 2005
Address: 4113 FULLER PL

Name: PACE AUTO
Year: 2010
Address: 4113 FULLER PL

Name: PACE AUTOMOBILE SERVICE
Year: 2011
Address: 4113 FULLER PL

Name: PACE AUTO SERVICE
Year: 2012
Address: 4113 FULLER PL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G36
ENE
1/8-1/4
0.235 mi.
1241 ft.

4111 FULLER PL
FLUSHING, NY 11355

EDR US Hist Auto Stat **1015480011**
N/A

Site 7 of 8 in cluster G

Relative:
Higher

EDR Historical Auto Stations:

Actual:
17 ft.

Name: ABP AUTO REBUILDERS INCORPORATED
Year: 1999
Address: 4111 FULLER PL

Name: ABP AUTO REBUILDERS INCORPORATED
Year: 2000
Address: 4111 FULLER PL

Name: ABP AUTO REBUILDERS INC
Year: 2003
Address: 4111 FULLER PL

Name: PACE AUTO
Year: 2004
Address: 4111 FULLER PL

Name: PACE AUTO
Year: 2005
Address: 4111 FULLER PL

Name: PACE AUTO SERVICE
Year: 2006
Address: 4111 FULLER PL

Name: PACE AUTO
Year: 2007
Address: 4111 FULLER PL

Name: PACE AUTO
Year: 2008
Address: 4111 FULLER PL

Name: PACE AUTO
Year: 2009
Address: 4111 FULLER PL

Name: ABP AUTO REBUIDLERS INC
Year: 2010
Address: 4111 FULLER PL

Name: ABP AUTOMOBILE REBUILDERS INCORPORAT
Year: 2011
Address: 4111 FULLER PL

Name: ABP AUTO REBUILDERS INC
Year: 2012
Address: 4111 FULLER PL

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

F37 **EDR US Hist Auto Stat** **1015205662**
ENE **13132 SANFORD AVE** **N/A**
1/8-1/4 **FLUSHING, NY 11355**
0.235 mi.
1242 ft. **Site 6 of 8 in cluster F**

Relative: EDR Historical Auto Stations:
Higher Name: HALLELUHAH PRAISE THE LORD AUTOMOTIV
Year: 2012
Actual: Address: 13132 SANFORD AVE
19 ft.

I38 **EDR US Hist Auto Stat** **1015194929**
NNW **12601 WILLETS POINT BLVD** **N/A**
1/8-1/4 **CORONA, NY 11368**
0.235 mi.
1243 ft. **Site 1 of 19 in cluster I**

Relative: EDR Historical Auto Stations:
Higher Name: QUEENS AUTO COLLISION
Year: 2008
Actual: Address: 12601 WILLETS POINT BLVD
9 ft.

I39 **NY AST** **A100293712**
NNW **127-11-13 WILLETS POINT BOULEVARD** **N/A**
1/8-1/4 **CORONA, NY 11368**
0.239 mi.
1261 ft. **Site 2 of 19 in cluster I**

Relative: **AST:**
Higher Region: STATE
DEC Region: 2
Actual: Site Status: Unregulated/Closed
9 ft. Facility Id: 2-609766
Program Type: PBS
UTM X: 597669.26291000005
UTM Y: 4512344.8365799999
Expiration Date: 11/08/2009
Site Type: Auto Service/Repair (No Gasoline Sales)

Affiliation Records:
Site Id: 333482
Affiliation Type: Facility Owner
Company Name: PASIANA RODRIGUEZ
Contact Type: PRESIDENT
Contact Name: PASIANA RODRIGUEZ
Address1: 72-64 150TH ST. 3D
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11367
Country Code: 001
Phone: (718) 672-5092
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 11/8/2004

Site Id: 333482
Affiliation Type: Mail Contact

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DACAR AUTO RADIATOR DISTRIBUTOR INC. (Continued)

A100293712

Company Name: DACAR AUTO RADIATOR DISTRIBUTOR INC.
Contact Type: Not reported
Contact Name: Not reported
Address1: 126-17 WILLETS POINT BOULEVARD
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 672-5092
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 11/8/2004

Site Id: 333482
Affiliation Type: On-Site Operator
Company Name: DACAR AUTO RADIATOR DISTRIBUTOR INC.
Contact Type: Not reported
Contact Name: PASIANA RODRIGUEZ
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 672-5092
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 11/8/2004

Site Id: 333482
Affiliation Type: Emergency Contact
Company Name: PASIANA RODRIGUEZ
Contact Type: Not reported
Contact Name: PASIANA RODRIGUEZ
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 672-5092
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 11/8/2004

Tank Info:

Tank Number: 001
Tank Id: 180747
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DACAR AUTO RADIATOR DISTRIBUTOR INC. (Continued)

A100293712

Equipment Records:

A00 - Tank Internal Protection - None
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
K01 - Spill Prevention - Catch Basin
D07 - Pipe Type - Plastic
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
I01 - Overfill - Float Vent Valve

Tank Location: 3
Tank Type: Plastic
Tank Status: Closed - In Place
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 55
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 08/18/1998
Register: True
Modified By: EJCALIFA
Last Modified: 10/22/2009
Material Name: Waste Oil/Used Oil

H40
WNW
1/8-1/4
0.239 mi.
1262 ft.

KONICA PHOTO IMAGING
123-01 ROOSEVELT AVE
FLUSHING, NY 11368
Site 3 of 3 in cluster H

RCRA-CESQG 1006810630
NY MANIFEST NYR000114470

Relative:
Higher

RCRA-CESQG:

Date form received by agency: 01/01/2007

Actual:
11 ft.

Facility name: KONICA PHOTO IMAGING
Facility address: 123-01 ROOSEVELT AVE
FLUSHING, NY 11368

EPA ID: NYR000114470
Mailing address: DARLINGTON AVE
MAHWAH, NJ 07430

Contact: STEVE C MILLER
Contact address: DARLINGTON AVE
MAHWAH, NJ 07430

Contact country: US
Contact telephone: (201) 574-4069
Contact email: Not reported

EPA Region: 02
Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KONICA PHOTO IMAGING (Continued)

1006810630

time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: NO NAME FOUND
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/15/2004
Owner/Op end date: Not reported

Owner/operator name: NO NAME FOUND
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 07/15/2004
Owner/Op end date: Not reported

Owner/operator name: KONICA/MINOLTA
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 07/15/2004
Owner/Op end date: Not reported

Owner/operator name: METS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, NY
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 03/27/2003
Owner/Op end date: Not reported

Owner/operator name: FRED WILPON GROUP
Owner/operator address: NOT REQUIRED
NOT REQUIRED, NY
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/27/2003
Owner/Op end date: Not reported

Owner/operator name: KONICA/MINOLTA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KONICA PHOTO IMAGING (Continued)

1006810630

Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/15/2004
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: KONICA PHOTO IMAGING
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/13/2004
Site name: KONICA PHOTO IMAGING
Classification: Small Quantity Generator

. Waste code: D011
. Waste name: SILVER

Date form received by agency: 03/27/2003
Site name: KONICA FILM ROOM - SHEA STADIUM
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

NY MANIFEST:

EPA ID: NYR000114470
Country: USA

Mailing Info:

Name: KONICA PHOTO IMAGING SHEA STADIUM
Contact: KONICA PHOTO IMAGING SHEA STADIUM
Address: 725 DARLINGTON AVE
City/State/Zip: MAHWAH, NJ 07430
Country: USA
Phone: 201-327-0895

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KONICA PHOTO IMAGING (Continued)

1006810630

Manifest:

Document ID: NYH0425232
Manifest Status: Not reported
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 07/15/2004
Trans1 Recv Date: 07/15/2004
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/15/2004
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000114470
Trans1 EPA ID: NYD082785429
Trans2 EPA ID: Not reported
TSD ID: NYD082785
Waste Code: D011 - SILVER 5.0 MG/L TCLP
Quantity: 00025
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2004

Document ID: MAQ0157889
Manifest Status: Not reported
Trans1 State ID: NY89930JE
Trans2 State ID: Not reported
Generator Ship Date: 03/31/2003
Trans1 Recv Date: 03/31/2003
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/10/2003
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000114470
Trans1 EPA ID: TXR000050930
Trans2 EPA ID: Not reported
TSD ID: MAD982755639
Waste Code: D011 - SILVER 5.0 MG/L TCLP
Quantity: 00075
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2003

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

I41
NNW
1/8-1/4
0.240 mi.
1266 ft.

12615 WILLETS POINT BLVD
CORONA, NY 11368

EDR US Hist Auto Stat **1015195124**
N/A

Site 3 of 19 in cluster I

Relative:
Higher

EDR Historical Auto Stations:

Name: AGF AUTO BODY
 Year: 2003
 Address: 12615 WILLETS POINT BLVD

Actual:
9 ft.

I42
NNW
1/8-1/4
0.241 mi.
1270 ft.

12617 WILLETS POINT BLVD
CORONA, NY 11368

EDR US Hist Auto Stat **1015195142**
N/A

Site 4 of 19 in cluster I

Relative:
Higher

EDR Historical Auto Stations:

Name: DACAR AUTO RADIATOR
 Year: 2002
 Address: 12617 WILLETS POINT BLVD

Actual:
9 ft.

Name: DACAR AUTO RADIATOR DSTRBTR INC
 Year: 2003
 Address: 12617 WILLETS POINT BLVD

Name: DACAR AUTO RADIATOR DSTRBTR INC
 Year: 2004
 Address: 12617 WILLETS POINT BLVD

Name: DACAR AUTO RADIATOR
 Year: 2007
 Address: 12617 WILLETS POINT BLVD

Name: DACAR AUTO RADIATOR
 Year: 2008
 Address: 12617 WILLETS POINT BLVD

Name: DACAR AUTO RADIATOR DISTRIBUTORS INC
 Year: 2009
 Address: 12617 WILLETS POINT BLVD

Name: DACAR AUTO RADIATOR
 Year: 2010
 Address: 12617 WILLETS POINT BLVD

Name: DACAR AUTOMOBILE RADIATOR
 Year: 2011
 Address: 12617 WILLETS POINT BLVD

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

I43
NNW
1/8-1/4
0.241 mi.
1270 ft.

12617 WILLETS POINT BLVD
CORONA-A, NY 11368

EDR US Hist Auto Stat **1015195141**
N/A

Site 5 of 19 in cluster I

Relative:
Higher

EDR Historical Auto Stations:
Name: DACAR AUTO RADIATOR
Year: 2006
Address: 12617 WILLETS POINT BLVD

Actual:
9 ft.

J44
NE
1/8-1/4
0.241 mi.
1272 ft.

DAVES AUTO CORP.
131-20, 41 AVE
FLUSHING, NY 11355

NY AST **A100293729**
N/A

Site 1 of 4 in cluster J

Relative:
Higher

AST:
Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-609765
Program Type: PBS
UTM X: 598304.05614
UTM Y: 4512250.9774000002
Expiration Date: 11/03/2019
Site Type: Other

Actual:
15 ft.

Affiliation Records:
Site Id: 333326
Affiliation Type: Facility Owner
Company Name: EASLE REALTY CORP/SCOTT EHRLER
Contact Type: PRESIDENT
Contact Name: SCOTT EHRLER
Address1: 41-16 FULLER PLACE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (516) 967-5612
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 12/5/2014

Site Id: 333326
Affiliation Type: Mail Contact
Company Name: DAVES AUTO CORP.
Contact Type: Not reported
Contact Name: KYAESUN KIM
Address1: 131-20, 41 AVE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 939-4179
EMail: Not reported
Fax Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DAVES AUTO CORP. (Continued)

A100293729

Modified By: CGFREEDM
Date Last Modified: 12/5/2014

Site Id: 333326
Affiliation Type: On-Site Operator
Company Name: DAVES AUTO CORP.
Contact Type: Not reported
Contact Name: HAEMAN KIM
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 939-4179
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 11/3/2004

Site Id: 333326
Affiliation Type: Emergency Contact
Company Name: KYAESUN KIM
Contact Type: Not reported
Contact Name: KYAE KIM
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (917) 301-8969
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 11/3/2004

Tank Info:

Tank Number: 001
Tank Id: 180738
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

I00 - Overfill - None
L00 - Piping Leak Detection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None
K00 - Spill Prevention - None
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G00 - Tank Secondary Containment - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DAVES AUTO CORP. (Continued)

A100293729

J00 - Dispenser - None
3
Tank Location:
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 09/23/2004
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: CGFREEDM
Last Modified: 12/05/2014
Material Name: Waste Oil/Used Oil

**I45
NNW
1/8-1/4
0.241 mi.
1273 ft.**

**12619 WILLETS POINT BLVD
CORONA, NY 11368
Site 6 of 19 in cluster I**

**EDR US Hist Auto Stat 1015195154
N/A**

**Relative:
Higher**

EDR Historical Auto Stations:

Name: SUNRISE AUTO BODYSHOP
Year: 2001
Address: 12619 WILLETS POINT BLVD

**Actual:
9 ft.**

Name: SUNRISE AUTO BODYSHOP
Year: 2002
Address: 12619 WILLETS POINT BLVD

Name: SUNRISE AUTO BODYSHOP
Year: 2003
Address: 12619 WILLETS POINT BLVD

Name: SUNRISE AUTO BODYSHOP
Year: 2004
Address: 12619 WILLETS POINT BLVD

Name: CRUSH & CRUSH AUTOBODY INC
Year: 2009
Address: 12619 WILLETS POINT BLVD

**I46
NNW
1/8-1/4
0.242 mi.
1276 ft.**

**12624 WILLETS POINT BLVD
CORONA, NY 11368
Site 7 of 19 in cluster I**

**EDR US Hist Auto Stat 1015195232
N/A**

**Relative:
Higher**

EDR Historical Auto Stations:

Name: AFGHAN AUTO BODY
Year: 1999
Address: 12624 WILLETS POINT BLVD

**Actual:
9 ft.**

Name: AFGHAN AUTO BODY
Year: 2000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

1015195232

Address: 12624 WILLETS POINT BLVD
Name: AFGHAN AUTO BODY
Year: 2001
Address: 12624 WILLETS POINT BLVD
Name: AFGHAN AUTO BODY
Year: 2002
Address: 12624 WILLETS POINT BLVD
Name: NYC AUTO COLLISION INC
Year: 2004
Address: 12624 WILLETS POINT BLVD
Name: NYC AUTO COLLISION & AUTO REPAIR
Year: 2007
Address: 12624 WILLETS POINT BLVD
Name: CITY FIELD AUTO COLLISION LLC
Year: 2009
Address: 12624 WILLETS POINT BLVD
Name: NYC AUTO COLLISION & AUTO REPAIR
Year: 2011
Address: 12624 WILLETS POINT BLVD
Name: NYC AUTO COLLISION & AUTO REPAIR
Year: 2012
Address: 12624 WILLETS POINT BLVD

J47
NE
1/8-1/4
0.242 mi.
1276 ft.

13117 41ST AVE
FLUSHING, NY 11355

Site 2 of 4 in cluster J

EDR US Hist Auto Stat 1015205222
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: SEOUL AUTO BODY REPAIRS TRAILER
Year: 1999
Address: 13117 41ST AVE

Name: SEOUL AUTO BODY REPAIRS TRAILER
Year: 2000
Address: 13117 41ST AVE

Name: DAVIS AUTO CORP
Year: 2001
Address: 13117 41ST AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I48
NNW
1/8-1/4
0.242 mi.
1279 ft.

12626 WILLETS POINT BLVD
CORONA, NY 11368

Site 8 of 19 in cluster I

EDR US Hist Auto Stat

1015195254
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: N & A AUTO SERVICE
Year: 2008
Address: 12626 WILLETS POINT BLVD

Actual:
9 ft.

Name: N & A AUTO SERVICE
Year: 2009
Address: 12626 WILLETS POINT BLVD

I49
NNW
1/8-1/4
0.242 mi.
1280 ft.

EXXON CO USA-CORONA
126-25 WILLETS POINT BLVD
CORONA, NY 11368

Site 9 of 19 in cluster I

RCRA NonGen / NLR
FINDS
NY MANIFEST

1000335574
NYD982728636

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: EXXON CO USA-CORONA
Facility address: 126-25 WILLETS POINT BLVD
CORONA, NY 113681603
EPA ID: NYD982728636
Mailing address: HEMPSTEAD TURNPIKE
EAST MEADOW, NY 11554
Contact: Not reported
Contact address: HEMPSTEAD TURNPIKE
EAST MEADOW, NY 11554
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
9 ft.

Owner/Operator Summary:

Owner/operator name: EXXON COMPANY USA
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: EXXON COMPANY USA
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EXXON CO USA-CORONA (Continued)

1000335574

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: EXXON CO USA-CORONA
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Site name: EXXON CO USA-CORONA
Classification: Not a generator, verified

Date form received by agency: 04/18/1989
Site name: EXXON CO USA-CORONA
Classification: Large Quantity Generator

. Waste code: X003
. Waste name: OTHER STATE REGULATED WASTES [i.e., DIESEL FUEL, GASOLINE AND HOME HEATING OIL]

Violation Status: No violations found

FINDS:

Registry ID: 110019564577

Environmental Interest/Information System

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

Registry ID: 110004429084

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EXXON CO USA-CORONA (Continued)

1000335574

NY MANIFEST:

EPA ID: NYD982728636
Country: USA

Mailing Info:

Name: EXXON CORPORATION
Contact: EXXON CORPORATION
Address: 1900 HEMPSTEAD TPKE
City/State/Zip: EAST MEADOW, NY 11554
Country: USA
Phone: 516-864-1772

Manifest:

Document ID: NYA7027722
Manifest Status: Completed copy
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 08/01/1989
Trans1 Recv Date: 08/01/1989
Trans2 Recv Date: / /
TSD Site Recv Date: 08/01/1989
Part A Recv Date: 08/14/1989
Part B Recv Date: 08/08/1989
Generator EPA ID: NYD982728636
Trans1 EPA ID: NYD082785429
Trans2 EPA ID: Not reported
TSD ID: NYD082785429
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00330
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 006
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 099
Year: 1989

F50
ENE
1/8-1/4
0.243 mi.
1283 ft.

13135 SANFORD AVE
FLUSHING, NY 11355
Site 7 of 8 in cluster F

EDR US Hist Auto Stat 1015205684
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: GO REO AUTO REPAIR
Year: 1999
Address: 13135 SANFORD AVE

Actual:
20 ft.

Name: GO REO AUTO REPAIR
Year: 2000
Address: 13135 SANFORD AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G51
NE
1/8-1/4
0.243 mi.
1284 ft.

13120 41ST AVE
FLUSHING, NY 11355

EDR US Hist Auto Stat **1015205400**
N/A

Site 8 of 8 in cluster G

Relative:
Higher

EDR Historical Auto Stations:

Actual:
15 ft.

- Name: DAVES AUTO CORP
Year: 2002
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2003
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2004
Address: 13120 41ST AVE
- Name: DAVIS AUTO BODY REPAIRS
Year: 2005
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2006
Address: 13120 41ST AVE
- Name: DAVIS AUTO BODY REPAIRS
Year: 2007
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2008
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2009
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2010
Address: 13120 41ST AVE
- Name: DAVES AUTOMOBILE CORPORATION
Year: 2011
Address: 13120 41ST AVE
- Name: DAVES AUTO CORP
Year: 2012
Address: 13120 41ST AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

152
NNW
1/8-1/4
0.243 mi.
1285 ft.

LATIN AMERICA AUTO REPAIR CORP.
126-26 WILLETS POINT BOULEVARD
CORONA, NY 11362

NY AST A100320109
N/A

Site 10 of 19 in cluster I

Relative:
Higher

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-605926
Program Type: PBS
UTM X: 597741.82106999995
UTM Y: 4512508.5599800004
Expiration Date: 03/31/2016
Site Type: Auto Service/Repair (No Gasoline Sales)

Actual:
9 ft.

Affiliation Records:

Site Id: 27792
Affiliation Type: Mail Contact
Company Name: TWO SONS AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: ARSHAD AKBAR
Address1: 126-26 WILLETS POINT BOULEVARD
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 205-1002
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/31/2011

Site Id: 27792
Affiliation Type: On-Site Operator
Company Name: TWO SONS AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: ARSHAD AKBAR
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (718) 205-1002
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/31/2011

Site Id: 27792
Affiliation Type: Emergency Contact
Company Name: TWO SONS AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: ARSHAD AKBAR
Address1: Not reported
Address2: Not reported
City: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LATIN AMERICA AUTO REPAIR CORP. (Continued)

A100320109

State: NN
Zip Code: Not reported
Country Code: 999
Phone: (718) 205-1002
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/31/2011

Site Id: 27792
Affiliation Type: Facility Owner
Company Name: TWO SONS AUTO REPAIR INC.
Contact Type: Not reported
Contact Name: Not reported
Address1: 126-26 WILLETS POINT BLVD
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 205-1002
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/31/2011

Tank Info:

Tank Number: 001
Tank Id: 60722
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
K00 - Spill Prevention - None

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 02/01/1998
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LATIN AMERICA AUTO REPAIR CORP. (Continued)

A100320109

Register: True
Modified By: NRLOMBAR
Last Modified: 03/31/2011
Material Name: Waste Oil/Used Oil

Tank Number: 2
Tank Id: 247894

Equipment Records:

K02 - Spill Prevention - Transfer Station Containment
H00 - Tank Leak Detection - None
E00 - Piping Secondary Containment - None
J03 - Dispenser - Gravity
G00 - Tank Secondary Containment - None
D00 - Pipe Type - No Piping
A00 - Tank Internal Protection - None
L00 - Piping Leak Detection - None
I02 - Overfill - High Level Alarm
F00 - Pipe External Protection - None
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping

Tank Location: 2
Tank Type: Fiberglass Reinforced Plastic
Tank Status: In Service
Pipe Model: Not reported
Install Date: 12/04/2012
Capacity Gallons: 100
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: NRLOMBAR
Last Modified: 04/17/2013
Material Name: Waste Oil/Used Oil

Affiliation Records:

Site Id: 480888
Affiliation Type: Facility Owner
Company Name: MARCELINO OBREGON
Contact Type: Not reported
Contact Name: Not reported
Address1: 127-26 WILLETS PT BLVD
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (917) 379-9423
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 4/17/2013

Site Id: 480888
Affiliation Type: Mail Contact

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LATIN AMERICA AUTO REPAIR CORP. (Continued)

A100320109

Company Name: LATIN AMERICA AUTO REPAIR CORP.
Contact Type: Not reported
Contact Name: MARCELINO OBREGON
Address1: 127-26 WILLETS POINT BOULEVARD
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (917) 379-9423
EMail: NONE
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 4/17/2013

Site Id: 480888
Affiliation Type: On-Site Operator
Company Name: LATIN AMERICA AUTO REPAIR CORP.
Contact Type: Not reported
Contact Name: MARCELINO OBREGON
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (917) 379-9423
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 4/17/2013

Site Id: 480888
Affiliation Type: Emergency Contact
Company Name: MARCELINO OBREGON
Contact Type: Not reported
Contact Name: JOSE QUALLPA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (862) 241-2466
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 4/17/2013

Tank Info:

Tank Number: 001
Tank Id: 60722
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LATIN AMERICA AUTO REPAIR CORP. (Continued)

A100320109

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
K00 - Spill Prevention - None

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 02/01/1998
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: NRLOMBAR
Last Modified: 03/31/2011
Material Name: Waste Oil/Used Oil

Tank Number: 2
Tank Id: 247894

Equipment Records:

K02 - Spill Prevention - Transfer Station Containment
H00 - Tank Leak Detection - None
E00 - Piping Secondary Containment - None
J03 - Dispenser - Gravity
G00 - Tank Secondary Containment - None
D00 - Pipe Type - No Piping
A00 - Tank Internal Protection - None
L00 - Piping Leak Detection - None
I02 - Overfill - High Level Alarm
F00 - Pipe External Protection - None
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping

Tank Location: 2
Tank Type: Fiberglass Reinforced Plastic
Tank Status: In Service
Pipe Model: Not reported
Install Date: 12/04/2012
Capacity Gallons: 100
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: NRLOMBAR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LATIN AMERICA AUTO REPAIR CORP. (Continued)

A100320109

Last Modified: 04/17/2013
Material Name: Waste Oil/Used Oil

**I53
NNW
1/8-1/4
0.244 mi.
1286 ft.**

**ACDC SCRAP METAL INC.
12630 WILLETS POINT BLVD.
CORONA, NY 11368**

**NY SWF/LF S113492652
N/A**

Site 11 of 19 in cluster I

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7182051699
Owner Name: Jimmy Espinoza
Owner Type: Private
Owner Address: 99-1157th Ave; Apt 2J
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 9174167815
Contact Name: Tommy Cohen
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: 7182051699
Activity Desc: Vehicle Dismantling
Activity Number: [7100473]
Active: No
East Coordinate: 597687
North Coordinate: 4512361
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
9 ft.**

**I54
NNW
1/8-1/4
0.244 mi.
1286 ft.**

**12630 WILLETS POINT BLVD
CORONA, NY 11368**

**EDR US Hist Auto Stat 1015195321
N/A**

Site 12 of 19 in cluster I

**Relative:
Higher**

EDR Historical Auto Stations:
Name: F & F AUTO SALVAGE
Year: 2001
Address: 12630 WILLETS POINT BLVD

Name: BEST AUTO MECHANIC & MUFFLER INC
Year: 2011
Address: 12630 WILLETS POINT BLVD

**Actual:
9 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I55 **SETTE JULIANO CONST.**
NW **39-09 126 ST**
1/8-1/4 **CORONA, NY 11368**
0.244 mi.
1289 ft. **Site 13 of 19 in cluster I**

NY UST **U001831387**
NY HIST UST **N/A**

Relative:
Higher

UST:
Id/Status: 2-044431 / Unregulated/Closed
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 12/30/1991
UTM X: 597621.06330000004
UTM Y: 4512318.5538299996
Site Type: Unknown

Actual:
9 ft.

Affiliation Records:
Site Id: 480
Affiliation Type: Facility Owner
Company Name: SETTE JULIANO CONST CORP
Contact Type: Not reported
Contact Name: Not reported
Address1: 38-05 126 ST
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 899-6767
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 480
Affiliation Type: Mail Contact
Company Name: SETTE JULIANO CONST CORP
Contact Type: Not reported
Contact Name: Not reported
Address1: 38-05 126 ST
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 899-6767
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 480
Affiliation Type: On-Site Operator
Company Name: SETTE JULIANO CONST.
Contact Type: Not reported
Contact Name: WILLIAM DELAFUENTE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Zip Code: Not reported
Country Code: 001
Phone: (718) 899-6767
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 480
Affiliation Type: Emergency Contact
Company Name: SETTE JULIANO CONST CORP
Contact Type: Not reported
Contact Name: WILLIAM DELAFUENTE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 886-2368
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 001
Tank ID: 1302
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Tank Number: 002
Tank ID: 1303
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

Tank Number: 003
Tank ID: 1304
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

Tank Number: 004
Tank ID: 1305
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Number: 005
Tank ID: 1306
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

Tank Number: 006
Tank ID: 1307
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Number: 007
Tank ID: 1308
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None
I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser

Tank Number: 008
Tank ID: 1309
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

Tank Number: 009
Tank ID: 1310
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None
I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser

Tank Number: 010
Tank ID: 1311
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

Tank Number: 011

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Tank ID: 1312
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Number: 012
Tank ID: 1313
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 09/01/1988
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

B00 - Tank External Protection - None
G99 - Tank Secondary Containment - Other
H00 - Tank Leak Detection - None

HIST UST:

PBS Number: 2-044431
SPDES Number: Not reported
Emergency Contact: WILLIAM DELAFUENTE
Emergency Telephone: (718) 886-2368
Operator: WILLIAM DELAFUENTE
Operator Telephone: (718) 899-6767
Owner Name: SETTE JULIANO CONST CORP
Owner Address: 38-05 126 ST
Owner City,St,Zip: CORONA, NY 11368
Owner Telephone: (718) 899-6767
Owner Type: Not reported
Owner Subtype: Not reported
Mailing Name: SETTE JULIANO CONST CORP
Mailing Address: 38-05 126 ST
Mailing Address 2: Not reported
Mailing City,St,Zip: CORONA, NY 11368
Mailing Contact: Not reported
Mailing Telephone: (718) 899-6767
Owner Mark: First Owner
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons) and Subpart 360-14.
Facility Addr2: 39009 126 ST
SWIS ID: 6301
Old PBS Number: Not reported
Facility Type: Not reported
Inspected Date: Not reported
Inspector: Not reported
Inspection Result: Not reported
Federal ID: Not reported
Certification Flag: False
Certification Date: 12/30/1986
Expiration Date: 12/30/1991
Renew Flag: False
Renewal Date: Not reported
Total Capacity: 0
FAMT: True
Facility Screen: Minor Data Missing
Owner Screen: Minor Data Missing
Tank Screen: 0
Dead Letter: False
CBS Number: Not reported
Town or City: NEW YORK CITY
County Code: 63
Town or City: 01
Region: 2

Tank Id: 001
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 002
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 003
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 004
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 005
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 006
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: LEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 007
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 008
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 009
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 010
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 011
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SETTE JULIANO CONST. (Continued)

U001831387

Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 012
Tank Location: UNDERGROUND
Tank Status: Closed-In Place
Install Date: Not reported
Capacity (gals): 550
Product Stored: LEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: GALVANIZED STEEL
Pipe Internal: Not reported
Pipe External: Not reported
Second Containment: Other
Leak Detection: None
Overfill Prot: Not reported
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 09/01/1988
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

I56
NW
1/8-1/4
0.245 mi.
1291 ft.

**3909 126TH ST
CORONA, NY 11368**

Site 14 of 19 in cluster I

**EDR US Hist Auto Stat 1015463586
N/A**

**Relative:
Higher**

EDR Historical Auto Stations:

Name: M & M AUTO BODY
Year: 2003
Address: 3909 126TH ST

Name: M & M AUTO BODY
Year: 2009
Address: 3909 126TH ST

Name: M & M AUTO BODY
Year: 2011
Address: 3909 126TH ST

Name: M & M AUTO BODY
Year: 2012
Address: 3909 126TH ST

**Actual:
9 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

I59
NNW
1/8-1/4
0.245 mi.
1294 ft.

ACDC SCRAP METAL INC
126-30 WILLETS POINT BLVD
CORONA, NY 11368

NY SWF/LF S108146148
N/A

Site 16 of 19 in cluster I

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597749
North Coordinate: 4512512
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
9 ft.

Flag: ACTIVE
Region Code: 2
Phone Number: 7183975555
Owner Name: Sunrise Auto Parts Inc
Owner Type: Private
Owner Address: 126-30 Willits Point Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7183975555
Contact Name: Natan Seri
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: NY
Contact Email: Not reported
Contact Phone: 7183975555
Activity Desc: Vehicle Dismantling
Activity Number: [7074463]
Active: Yes
East Coordinate: 597920
North Coordinate: 4512942
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ACDC SCRAP METAL INC (Continued)

S108146148

Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**I60
NNW
1/8-1/4
0.245 mi.
1294 ft.**

**SUNRISE AUTO PARTS INC.
126-30 WILLETS POINT BOULEVARD
CORONA, NY 11368**

**NY AST A100194199
N/A**

Site 17 of 19 in cluster I

**Relative:
Higher**

AST:

Region: STATE
DEC Region: 2
Site Status: Unregulated/Closed
Facility Id: 2-607168
Program Type: PBS
UTM X: 597740.87294999999
UTM Y: 4512516.43044999999
Expiration Date: 11/15/2016
Site Type: Other

**Actual:
9 ft.**

Affiliation Records:

Site Id: 29022
Affiliation Type: Facility Owner
Company Name: SUNRISE AUTO PARTS INC.
Contact Type: Not reported
Contact Name: Not reported
Address1: 126-30 WILLETS POINT BLVD
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 397-5555
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 12/16/2014

Site Id: 29022
Affiliation Type: Mail Contact
Company Name: SUNRISE AUTO PARTS INC.
Contact Type: Not reported
Contact Name: NATAN SERI
Address1: 126-30 WILLETS POINT BOULEVAR D
Address2: Not reported
City: CORONA
State: NY
Zip Code: 11368
Country Code: 001
Phone: (718) 397-5555
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 12/16/2014

Site Id: 29022
Affiliation Type: On-Site Operator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Company Name: SUNRISE AUTO PARTS INC.
Contact Type: Not reported
Contact Name: NATAN SERI
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 397-5555
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 29022
Affiliation Type: Emergency Contact
Company Name: SUNRISE AUTO PARTS INC.
Contact Type: Not reported
Contact Name: NATAN SERI
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (917) 217-7848
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 12/16/2014

Tank Info:

Tank Number: 001
Tank Id: 62439
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G05 - Tank Secondary Containment - Synthetic Liner
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G01 - Tank Secondary Containment - Diking (Aboveground)
J00 - Dispenser - None
K99 - Spill Prevention - Other
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Pipe Model: Not reported
Install Date: 09/03/2002
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 09/02/2014
Register: True
Modified By: NRLOMBAR
Last Modified: 12/16/2014
Material Name: Waste Oil/Used Oil

Tank Number: 001
Tank Id: 210477
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/05/2006
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: NRLOMBAR
Last Modified: 03/15/2006
Material Name: Waste Oil/Used Oil

Tank Number: 002
Tank Id: 62440
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

- C00 - Pipe Location - No Piping
- F00 - Pipe External Protection - None
- G05 - Tank Secondary Containment - Synthetic Liner
- A00 - Tank Internal Protection - None
- D00 - Pipe Type - No Piping
- J00 - Dispenser - None
- K99 - Spill Prevention - Other
- I00 - Overfill - None
- L00 - Piping Leak Detection - None
- B00 - Tank External Protection - None
- E00 - Piping Secondary Containment - None
- H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 09/03/2002

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Capacity Gallons: 55
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 09/02/2014
Register: True
Modified By: NRLOMBAR
Last Modified: 12/16/2014
Material Name: Waste Oil/Used Oil

Tank Number: 003
Tank Id: 62441
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G05 - Tank Secondary Containment - Synthetic Liner
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
J00 - Dispenser - None
K99 - Spill Prevention - Other
I00 - Overfill - None
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 09/03/2002
Capacity Gallons: 55
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 09/02/2014
Register: True
Modified By: NRLOMBAR
Last Modified: 12/16/2014
Material Name: Waste Oil/Used Oil

Affiliation Records:

Site Id: 361057
Affiliation Type: Facility Owner
Company Name: JIMMY ESPINOSA
Contact Type: OWNER
Contact Name: JIMMY ESPINOSA
Address1: 140-50 ASH AVENUE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Phone: (718) 205-1698
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/15/2006

Site Id: 361057
Affiliation Type: Mail Contact
Company Name: TOMER CHAZBANI
Contact Type: Not reported
Contact Name: Not reported
Address1: 80-35 222ND STREET
Address2: Not reported
City: HOLLIS HILLS
State: NY
Zip Code: 11427
Country Code: 001
Phone: (718) 205-1699
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2/18/2009

Site Id: 361057
Affiliation Type: On-Site Operator
Company Name: ACDC SCRAP METAL INC.
Contact Type: Not reported
Contact Name: MIKE DON
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 205-1699
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/15/2006

Site Id: 361057
Affiliation Type: Emergency Contact
Company Name: JIMMY ESPINOSA
Contact Type: Not reported
Contact Name: TOMMY
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (917) 416-7815
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 3/15/2006

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Tank Info:

Tank Number: 001
Tank Id: 62439
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G05 - Tank Secondary Containment - Synthetic Liner
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G01 - Tank Secondary Containment - Diking (Aboveground)
J00 - Dispenser - None
K99 - Spill Prevention - Other
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 09/03/2002
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 09/02/2014
Register: True
Modified By: NRLOMBAR
Last Modified: 12/16/2014
Material Name: Waste Oil/Used Oil

Tank Number: 001
Tank Id: 210477
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/05/2006
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: NRLOMBAR
Last Modified: 03/15/2006
Material Name: Waste Oil/Used Oil

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Tank Number: 002
Tank Id: 62440
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G05 - Tank Secondary Containment - Synthetic Liner
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
J00 - Dispenser - None
K99 - Spill Prevention - Other
I00 - Overfill - None
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 09/03/2002
Capacity Gallons: 55
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 09/02/2014
Register: True
Modified By: NRLOMBAR
Last Modified: 12/16/2014
Material Name: Waste Oil/Used Oil

Tank Number: 003
Tank Id: 62441
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G05 - Tank Secondary Containment - Synthetic Liner
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
J00 - Dispenser - None
K99 - Spill Prevention - Other
I00 - Overfill - None
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNRISE AUTO PARTS INC. (Continued)

A100194199

Install Date: 09/03/2002
Capacity Gallons: 55
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 09/02/2014
Register: True
Modified By: NRLOMBAR
Last Modified: 12/16/2014
Material Name: Waste Oil/Used Oil

**J61
NE
1/8-1/4
0.246 mi.
1300 ft.**

**M.S. AUTO & TRUCK SERVICES INC.
131-25 41ST AVENUE
FLUSHING, NY 11355**

**NY AST A100178180
N/A**

Site 4 of 4 in cluster J

**Relative:
Higher**

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-605942
Program Type: PBS
UTM X: 598297.08024000004
UTM Y: 4512242.2246300001
Expiration Date: 06/04/2011
Site Type: Other

**Actual:
16 ft.**

Affiliation Records:

Site Id: 27808
Affiliation Type: Facility Owner
Company Name: M.S. AUTO & TRUCK SERVICES INC.
Contact Type: PRES.
Contact Name: YI. I CHEN
Address1: 131-25 41ST AVENUE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 463-3644
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 1/30/2007

Site Id: 27808
Affiliation Type: Mail Contact
Company Name: M. S. AUTO & TRUCK SERVICES INC.
Contact Type: Not reported
Contact Name: YI. I CHEN
Address1: 131-25 41ST AVENUE
Address2: Not reported
City: FLUSHING
State: NY
Zip Code: 11355
Country Code: 001
Phone: (718) 463-3644

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

M.S. AUTO & TRUCK SERVICES INC. (Continued)

A100178180

EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 1/30/2007

Site Id: 27808
Affiliation Type: On-Site Operator
Company Name: M.S. AUTO & TRUCK SERVICES INC.
Contact Type: Not reported
Contact Name: YI. I CHEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 463-3644
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 27808
Affiliation Type: Emergency Contact
Company Name: M.S. AUTO & TRUCK SERVICES INC.
Contact Type: Not reported
Contact Name: YI. I CHEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 463-3644
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 01
Tank Id: 60740
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G10 - Tank Secondary Containment - Impervious Underlayment
J00 - Dispenser - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

M.S. AUTO & TRUCK SERVICES INC. (Continued)

A100178180

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 03/01/2000
Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: NRLOMBAR
Last Modified: 01/30/2007
Material Name: Waste Oil/Used Oil

F62
ENE
1/8-1/4
0.246 mi.
1300 ft.

KEPCO INC
131-38 SANFORD AVE
FLUSHING, NY 11352

Site 8 of 8 in cluster F

RCRA-CESQG **1000176411**
FINDS **NYD001519750**
NJ MANIFEST
NY MANIFEST

Relative:
Higher

RCRA-CESQG:

Actual:
21 ft.

Date form received by agency: 01/01/2007
Facility name: KEPCO INC
Facility address: 131-38 SANFORD AVE
FLUSHING, NY 11352
EPA ID: NYD001519750
Mailing address: SANFORD AVE
FLUSHING, NY 11352
Contact: ED BAUER
Contact address: SANFORD AVE
FLUSHING, NY 11352
Contact country: US
Contact telephone: (718) 461-7000
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: KUPFERBERG, JACK - PRES
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: KUPFERBERG, JACK - PRES
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Site name: KEPCO INC
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 11/03/1989
Site name: KEPCO INC
Classification: Small Quantity Generator

. Waste code: X002
. Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 07/16/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Registry ID: 110004335158

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

NJ MANIFEST:

EPA Id: NYD001519750
Mail Address: 131-38 SANFORD AVENUE
Mail City/State/Zip: FLUSHING 11352
Facility Phone: 7184617000
Emergency Phone: Not reported
Contact: Not reported
Comments: Not reported
SIC Code: Not reported
County: 00
Municipal: 00
Previous EPA Id: Not reported
Gen Flag: X
Trans Flag: Not reported
TSD Flag: Not reported
Name Change: Not reported
Date Change: Not reported

Manifest:

Manifest Number: NJA5047813
EPA ID: NYD001519750
Date Shipped: 07/13/2004
TSD EPA ID: NJD047318043
Transporter EPA ID: NJD047318043
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 07/13/2004
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Date TSDF Received Waste: 07/14/2004
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: 08310421
Was Load Rejected: FLUSHING 11352
Reason Load Was Rejected: Not reported

Manifest Number: NJA5283874
EPA ID: NYD001519750
Date Shipped: 01/18/2006
TSDF EPA ID: NJD047318043
Transporter EPA ID: MIK625426333
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 01/18/2006
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 01/18/2006
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: 02270622
Was Load Rejected: FLUSHING 11352
Reason Load Was Rejected: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Manifest Number: NJA5047921
EPA ID: NYD001519750
Date Shipped: 03/01/2004
TSDf EPA ID: NJD047318043
Transporter EPA ID: NJD047318043
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 03/01/2004
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDf Received Waste: 03/01/2004
TSDf EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: 04300425
Was Load Rejected: FLUSHING 11352
Reason Load Was Rejected: Not reported

Manifest Number: NJA5225565
EPA ID: NYD001519750
Date Shipped: 04/19/2005
TSDf EPA ID: NJD047318043
Transporter EPA ID: NJD047318043
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 04/19/2005
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 04/19/2005
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: 06220525
Was Load Rejected: FLUSHING 11352
Reason Load Was Rejected: Not reported

NY MANIFEST:

EPA ID: NYD001519750
Country: USA

Mailing Info:

Name: KEPCO INCORPORATED
Contact: C MOONSAMMY
Address: 131-38 SANFORD AVENUE
City/State/Zip: FLUSHING, NY 11352
Country: USA
Phone: 718-461-7000

Manifest:

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: TXR000081205
Trans2 State ID: NJD071629976
Generator Ship Date: 03/03/2014
Trans1 Recv Date: 03/03/2014
Trans2 Recv Date: 03/14/2014
TSD Site Recv Date: 03/17/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: KYD053348108
Waste Code: Not reported
Quantity: 400
Units: P - Pounds
Number of Containers: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1
Year: 2014
Manifest Tracking Num: 004139622SKS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: TXR000081205
Trans2 State ID: PAR000524041
Generator Ship Date: 07/11/2014
Trans1 Recv Date: 07/11/2014
Trans2 Recv Date: 07/21/2014
TSD Site Recv Date: 07/29/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: KYD053348108
Waste Code: Not reported
Quantity: 400
Units: P - Pounds
Number of Containers: 1
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1
Year: 2014
Manifest Tracking Num: 004265765SKS
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Trans2 State ID: NCR000138107
Generator Ship Date: 09/01/2009
Trans1 Recv Date: 09/01/2009
Trans2 Recv Date: 09/03/2009
TSD Site Recv Date: 09/08/2009
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2009
Manifest Tracking Num: 001207907JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 04/21/2009
Trans1 Recv Date: 04/21/2009
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/23/2009
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2009
Manifest Tracking Num: 001207876JJK
Import Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 09/13/2011
Trans1 Recv Date: 09/13/2011
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/14/2011
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2011
Manifest Tracking Num: 001208561JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 02/15/2011
Trans1 Recv Date: 02/15/2011
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/17/2011
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2011
Manifest Tracking Num: 001208520JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 02/13/2008
Trans1 Recv Date: 02/19/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/21/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 001207734JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 12/09/2008
Trans1 Recv Date: 12/09/2008
Trans2 Recv Date: Not reported
TSD Site Recv Date: 12/11/2008
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2008
Manifest Tracking Num: 001207838JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 01/17/2012
Trans1 Recv Date: 01/17/2012
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/19/2012
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 001208590JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 07/31/2012
Trans1 Recv Date: 07/31/2012
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/02/2012
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 001208624JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 04/23/2013
Trans1 Recv Date: 04/23/2013
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/24/2013
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1
Year: 2013
Manifest Tracking Num: 001208670JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 09/04/2007
Trans1 Recv Date: 09/04/2007
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/07/2007
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 150
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 3
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Year: 2007
Manifest Tracking Num: 001207650JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MIK625426333
Trans2 State ID: Not reported
Generator Ship Date: 11/27/2007
Trans1 Recv Date: 11/27/2007
Trans2 Recv Date: Not reported
TSD Site Recv Date: 11/29/2007
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NCD049773245
Waste Code: Not reported
Quantity: 50
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 1
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1

Year: 2007
Manifest Tracking Num: 001207692JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: NJA5047921
Manifest Status: Not reported
Trans1 State ID: NJS6348
Trans2 State ID: Not reported
Generator Ship Date: 03/01/2004
Trans1 Recv Date: 03/01/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/01/2004
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: NJD047318043
Trans2 EPA ID: Not reported
TSD ID: NJD047318
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00100
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2004

Document ID: NJA5047813
Manifest Status: Not reported
Trans1 State ID: NJ56348
Trans2 State ID: Not reported
Generator Ship Date: 07/13/2004
Trans1 Recv Date: 07/13/2004
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/14/2004
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: NJD047318043
Trans2 EPA ID: Not reported
TSD ID: NJD047318
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00100
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2004

Document ID: ALA0044325
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: JA125
Trans2 State ID: NJD8817
Generator Ship Date: 07/01/1997
Trans1 Recv Date: 07/01/1997
Trans2 Recv Date: 07/10/1997
TSD Site Recv Date: 07/15/1997
Part A Recv Date: / /
Part B Recv Date: 08/18/1997
Generator EPA ID: NYD001519750
Trans1 EPA ID: NJD047318043
Trans2 EPA ID: PAD987358587
TSD ID: ALD981020894
Waste Code: D008 - LEAD 5.0 MG/L TCLP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Quantity: 00200
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 1997

Document ID: NJA3110908
Manifest Status: Not reported
Trans1 State ID: NJ481
Trans2 State ID: Not reported
Generator Ship Date: 11/28/2000
Trans1 Recv Date: 11/28/2000
Trans2 Recv Date: Not reported
TSD Site Recv Date: 11/28/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: NJD047318043
Trans2 EPA ID: Not reported
TSD ID: NJD047318043
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00200
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2000

Document ID: NJA3110684
Manifest Status: Not reported
Trans1 State ID: NJ481
Trans2 State ID: Not reported
Generator Ship Date: 03/29/2000
Trans1 Recv Date: 03/29/2000
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/29/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD001519750
Trans1 EPA ID: NJD047318043
Trans2 EPA ID: Not reported
TSD ID: NJD047318043
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00200
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KEPCO INC (Continued)

1000176411

Document ID: NYB4018563
Manifest Status: Completed copy
Trans1 State ID: PD1010
Trans2 State ID: Not reported
Generator Ship Date: 03/30/1993
Trans1 Recv Date: 03/30/1993
Trans2 Recv Date: / /
TSD Site Recv Date: 03/30/1993
Part A Recv Date: 04/07/1993
Part B Recv Date: 04/12/1993
Generator EPA ID: NYD001519750
Trans1 EPA ID: NYD077444263
Trans2 EPA ID: Not reported
TSDF ID: NYD077444263
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 1993

Document ID: NYA7678755
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: NL6934
Trans2 State ID: Not reported
Generator Ship Date: 11/22/1989
Trans1 Recv Date: 11/22/1989
Trans2 Recv Date: / /
TSD Site Recv Date: 11/22/1989
Part A Recv Date: 12/21/1989
Part B Recv Date: 12/21/1989
Generator EPA ID: NYD001519750
Trans1 EPA ID: NYD077444263
Trans2 EPA ID: Not reported
TSDF ID: NYD077444263
Waste Code: B004 - PCB ARTICLES WITH 50 PPM BUT < 500 PPM
Quantity: 00300
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00450
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 1989

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

I63
NNW
1/8-1/4
0.248 mi.
1309 ft.

12633 WILLETS POINT BLVD
CORONA-A, NY 11368

EDR US Hist Auto Stat 1015195345
N/A

Site 18 of 19 in cluster I

Relative:
Higher

EDR Historical Auto Stations:

Name: J & P AUTO REPAIR
 Year: 2006
 Address: 12633 WILLETS POINT BLVD

Actual:
9 ft.

I64
NNW
1/8-1/4
0.248 mi.
1309 ft.

12633 WILLETS POINT BLVD
CORONA, NY 11368

EDR US Hist Auto Stat 1015195346
N/A

Site 19 of 19 in cluster I

Relative:
Higher

EDR Historical Auto Stations:

Name: SUNRISE AUTO BODYSHOP
 Year: 2000
 Address: 12633 WILLETS POINT BLVD

Actual:
9 ft.

Name: MIKE AUTO REPAIR
 Year: 2003
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR CO
 Year: 2004
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR
 Year: 2005
 Address: 12633 WILLETS POINT BLVD

Name: JP AUTO REPAIR
 Year: 2007
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR
 Year: 2008
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR
 Year: 2009
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR
 Year: 2010
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR
 Year: 2011
 Address: 12633 WILLETS POINT BLVD

Name: J & P AUTO REPAIR
 Year: 2012
 Address: 12633 WILLETS POINT BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

K65
NNW
1/4-1/2
0.278 mi.
1470 ft.

CASEY STENGEL DEPOT
126-53 WILLETS POINT BLVD
FLUSHING, NY

NY LTANKS **S102150488**
NY Spills **N/A**

Site 1 of 5 in cluster K

Relative:
Higher

LTANKS:

Actual:
9 ft.

Site ID: 323763
Spill Number/Closed Date: 0105382 / 10/25/2002
Spill Date: 8/17/2001
Spill Cause: Tank Failure
Spill Source: Non Major Facility > 1,100 gal
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 8/17/2001
CID: 322
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 8/17/2001
Spill Record Last Update: 10/25/2002
Spiller Name: JAMES CRANDALL
Spiller Company: NEW YORK CITY TRANSIT
Spiller Address: 370 JAY STREET
Spiller City,St,Zip: BROOKLYN, NY 11201-001
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 260818
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"liquid in interstitial was water not product. sensor detects liquid and can not distinguish between water or product. water was cleared and alarm reset. no alarms since then.

Remarks: leaking storage tank caused spill to pavement and contained in a vault area - spill being cleaned up at this time

Material:

Site ID: 323763
Operable Unit ID: 842292
Operable Unit: 01
Material ID: 533852
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 10
Units: Gallons
Recovered: 10
Resource Affected: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S102150488

Oxygenate: False

Tank Test:

SPILLS:

Facility ID: 9907598
Facility Type: ER
DER Facility ID: 67419
Site ID: 71200
DEC Region: 2
Spill Date: 9/23/1999
Spill Number/Closed Date: 9907598 / 7/1/2005
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 9/23/1999
CID: 390
Water Affected: Not reported
Spill Source: Non Major Facility > 1,100 gal
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/23/1999
Spill Record Last Update: 7/1/2005
Spiller Name: ERIC JONES
Spiller Company: CASY STANGO BUS DEPOT
Spiller Address: 126-53 WILLETS POINT BLVD
Spiller City,St,Zip: FLUSHING, ZZ
Spiller Company: 001
Contact Name: ERIC JONES
Contact Phone: (718) 243-4581
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"07-01-05: Leak from a hose on a hydraulic bus lift. Product spilled to a concrete pit under the lift. Originally, the pit had a drain that went to the sewer, but thhe drain had been closed soon after construction to prevent a spill from going into the sewer. It was determined that 30 gallons was lost based on the capacity of the resevoir and how much product was left in the resevoir. Spill cleaned by Depot personnel.

Remarks: engine lift caused leak and went into a pit made of concrete

Material:

Site ID: 71200
Operable Unit ID: 1081881
Operable Unit: 01
Material ID: 300296
Material Code: 0010
Material Name: Hydraulic Oil
Case No.: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S102150488

Material FA: Petroleum
Quantity: 30
Units: Gallons
Recovered: 30
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0205512
Facility Type: ER
DER Facility ID: 67419
Site ID: 71194
DEC Region: 2
Spill Date: 8/26/2002
Spill Number/Closed Date: 0205512 / 3/17/2004
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 8/26/2002
CID: 396
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/26/2002
Spill Record Last Update: 3/19/2004
Spiller Name: CALLER
Spiller Company: NYC TRANSIT
Spiller Address: 370 JAY ST
Spiller City,St,Zip: BROOKLYN, NY 11201-001
Spiller Company: JOSEPHINE BROWN
Contact Name: JOSEPHINE BROWN
Contact Phone: (718) 243-4581
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE" Flex connector failed on discharge for diesel tank \$. Product contained by secondary and sump as confirmed by testing. Flex replaced, primary and secondary lines retested and passed. Product cleaned from sump.

Remarks: material found in a sump. tank associated w/ sump has been tagged out. clean up has begun.

Material:
Site ID: 71194
Operable Unit ID: 856958
Operable Unit: 01
Material ID: 519711
Material Code: 0008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S102150488

Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9506056
Facility Type: ER
DER Facility ID: 67419
Site ID: 71197
DEC Region: 2
Spill Date: 8/16/1995
Spill Number/Closed Date: 9506056 / 12/27/2000
Spill Cause: Human Error
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 8/16/1995
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Affected Persons
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/27/1995
Spill Record Last Update: 1/24/2003
Spiller Name: JOSEPHINE BROWN
Spiller Company: NYCT
Spiller Address: 3780 JAY STREET
Spiller City,St,Zip: BROOKLYN, NY
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"transferred from Hale to Tibbe. refer to 93-09299. tanks repaired/replaced/upgraded. remediation pending.

Remarks: CONTRACTOR WAS DRILLING AND HIT FUEL LINE - NYC TRANSIT REPS ARE ENROUTE - INSTALLING A MONITORING WELL, REQUESTED BY ZHITOMIRSKY, THE CONTRACTOR PUNCTURED A LINE, & IS STILL LEAKING OUT

Material:
Site ID: 71197
Operable Unit ID: 1020852
Operable Unit: 01
Material ID: 364039

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S102150488

Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9504885
Facility Type: ER
DER Facility ID: 67419
Site ID: 71196
DEC Region: 2
Spill Date: 7/21/1995
Spill Number/Closed Date: 9504885 / 6/2/2004
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 7/21/1995
CID: Not reported
Water Affected: Not reported
Spill Source: Tank Truck
Spill Notifier: Local Agency
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/14/1995
Spill Record Last Update: 6/2/2004
Spiller Name: Not reported
Spiller Company: NYCTA
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"10/3/03 - AUSTIN - TRANSFERRED FROM HALE TO TIBBE - ENDNYCT has no further information on this spill.
Remarks: LEAKING FILL LINE FAILED ON TANK TRUCK.
Material:
Site ID: 71196
Operable Unit ID: 1015789
Operable Unit: 01
Material ID: 366410
Material Code: 0008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S102150488

Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0501189
Facility Type: ER
DER Facility ID: 67419
Site ID: 344356
DEC Region: 2
Spill Date: 4/28/2005
Spill Number/Closed Date: 0501189 / 10/6/2005
Spill Cause: Unknown
Spill Class: Not reported
SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 4/28/2005
CID: 407
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 4/28/2005
Spill Record Last Update: 10/6/2005
Spiller Name: Not reported
Spiller Company: UNKNOWN AT THIS TIME
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 001
Contact Name: OLUCHI DUROHA
Contact Phone: (718) 243-4581
DEC Memo: 10-06-05: According to NYCT, the inventory discrepancy was due to instrumentation error. No visible signs of a leak. Sumps tested and passed. Instrumentation corrected.
Remarks: Caller states there is a 25 to 50 gallon discrepancy, they have changed dispensers and gauges, going to check tank for visible leaks tomorrow morning.

Material:
Site ID: 344356
Operable Unit ID: 1102998
Operable Unit: 01
Material ID: 583211
Material Code: 0008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASEY STENGEL DEPOT (Continued)

S102150488

Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

[Click this hyperlink](#) while viewing on your computer to access additional NY_SPILL: detail in the EDR Site Report.

K66
NNW
1/4-1/2
0.282 mi.
1488 ft.

WILLETS PT AUTO SALVAGE, INC.
126-55 WILLETS PT. BLVD.
CORONA, NY 11368

NY SWF/LF **S108146214**
NY CBS **N/A**

Site 2 of 5 in cluster K

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7188032792
Owner Name: Willets Point Auto Salvage Inc
Owner Type: Private
Owner Address: 126-55 Willets Point Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corna, NY 11368
Owner Email: Not reported
Owner Phone: 7188032792
Contact Name: Fernando Ferreira
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: NY
Contact Email: Not reported
Contact Phone: 7188032792
Activity Desc: Vehicle Dismantling
Activity Number: [7058439]
Active: No
East Coordinate: 597726
North Coordinate: 4512539
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
9 ft.

CBS:

CBS Number: 2-000386
Program Type: CBS
Facility Status: Unregulated/Closed
Expiration Date: 10/01/2007
Dec Region: 2
UTMX: 597682.57253

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WILLETS PT AUTO SALVAGE, INC. (Continued)

S108146214

UTMY: 4512402.07051

**K67
NNW
1/4-1/2
0.284 mi.
1501 ft.**

**JACOB TIRE
126-58 WILLETS POINT BLVD
CORONA, NY 11368**

**NY SWF/LF S108145927
N/A**

Site 3 of 5 in cluster K

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597755
North Coordinate: 4512529
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
9 ft.**

**L68
NW
1/4-1/2
0.297 mi.
1567 ft.**

**ROYAL USED CARS
38-15A 126TH STREET
CORONA, NY 11368**

**NY SWF/LF S108146101
N/A**

Site 1 of 3 in cluster L

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported

**Actual:
9 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROYAL USED CARS (Continued)

S108146101

Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597595
North Coordinate: 4512408
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**L69
NW
1/4-1/2
0.298 mi.
1573 ft.**

**ROYAL USED CARS INC.
3815 126TH STREET
FLUSHING, NY 11368
Site 2 of 3 in cluster L**

**NY SWF/LF S111711092
N/A**

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7187795327
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597595
North Coordinate: 4512408
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
9 ft.**

Flag: INACTIVE
Region Code: 2
Phone Number: 7185650754
Owner Name: Ahmad Javid Bassam
Owner Type: Private
Owner Address: 3815 126th Street
Owner Addr2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROYAL USED CARS INC. (Continued)

S111711092

Owner City,St,Zip: Flushing, NY 11368
Owner Email: Not reported
Owner Phone: 7185650754
Contact Name: Ahmad Wahid
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: NY
Contact Email: Not reported
Contact Phone: 7185650754
Activity Desc: Vehicle Dismantling
Activity Number: [7077914]
Active: No
East Coordinate: 597586
North Coordinate: 4512408
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

K70
NNW
1/4-1/2
0.303 mi.
1601 ft.

ARIAS AUTO REPAIR
126-31 38TH AVENUE
CORONA, NY 11368
Site 4 of 5 in cluster K

NY SWF/LF S108145974
NY TANKS N/A

Relative:
Higher

SWF/LF:

Actual:
9 ft.

Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597617
North Coordinate: 4512451
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

TANKS:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ARIAS AUTO REPAIR (Continued)

S108145974

Facility Id: 2-606079
Region: STATE
DEC Region: 2
Site Status: Active
Program Type: PBS
Expiration Date: 09/30/2010
UTM X: 597621.26323000004
UTM Y: 4512437.9109800002

L71
NW
1/4-1/2
0.304 mi.
1607 ft.

MANUEL AUTO REPAIR
38-05 126TH STREET
CORONA, NY 11368
Site 3 of 3 in cluster L

NY SWF/LF S107785591
NY HIST AST N/A

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597592
North Coordinate: 4512415
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
9 ft.

HIST AST:
PBS Number: 2-607098
SWIS Code: 6301
Operator: MANUEL BONILLA
Facility Phone: (718) 397-7174
Facility Addr2: Not reported
Facility Type: Not reported
Emergency: MANUEL BONILLA
Emergency Tel: (718) 224-8325
Old PBSNO: Not reported
Date Inspected: Not reported
Inspector: Not reported
Result of Inspection: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANUEL AUTO REPAIR (Continued)

S107785591

Owner Name: MANUEL BONILLA
Owner Address: 212-15 35TH AVENUE
Owner City,St,Zip: BAYSIDE, NY 11361
Federal ID: Not reported
Owner Tel: (718) 224-8325
Owner Type: Private Resident
Owner Subtype: Not reported
Mailing Contact: MANUEL BONILLA
Mailing Name: MANUEL AUTO REPAIR
Mailing Address: 38-05 126TH STREET
Mailing Address 2: Not reported
Mailing City,St,Zip: CORONA, NY 11368
Mailing Telephone: (718) 397-7174
Owner Mark: First Owner
Facility Status: 4 - Subpart 360-14 only (active)
Certification Flag: False
Certification Date: 10/26/2001
Expiration: 10/23/2006
Renew Flag: False
Renew Date: Not reported
Total Capacity: 275
FAMT: True
Facility Screen: Minor Data Missing
Owner Screen: No Missing Data
Tank Screen: No Missing Data
Dead Letter: False
CBS Number: Not reported
Town or City: NEW YORK CITY
County Code: 63
Town or City Code: 01
Region: 2

Tank ID: 1
Tank Location: ABOVEGROUND
Tank Status: In Service
Install Date: Not reported
Capacity (Gal): 275
Product Stored: USED OIL
Tank Type: Steel/carbon steel
Tank Internal: 0
Tank External: 1
Pipe Location: Aboveground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: 1
Tank Containment: 8
Leak Detection: 0
Overfill Protection: 0
Dispenser Method: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: Not reported
Test Method: Not reported
Deleted: False
Updated: True
SPDES Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANUEL AUTO REPAIR (Continued)

S107785591

Lat/Long: Not reported

K72
NNW
1/4-1/2
0.314 mi.
1656 ft.

NEW SPOTLESS M & G SHOP
126-75 WILLETS POINT BLVD
CORONA, NY 11368

NY SWF/LF **S104510815**
NY Spills **N/A**
NY E DESIGNATION

Site 5 of 5 in cluster K

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597730
North Coordinate: 4512551
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
9 ft.

SPILLS:

Facility ID: 0504729
Facility Type: ER
DER Facility ID: 148067
Site ID: 349557
DEC Region: 2
Spill Date: 7/19/2005
Spill Number/Closed Date: 0504729 / 9/23/2005
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: SKARAKHA
Referred To: Not reported
Reported to Dept: 7/20/2005
CID: 444
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 7/20/2005
Spill Record Last Update: 9/23/2005
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: 40 ELDRIDGE AV
Spiller City,St,Zip: STATEN ISLAND, NY
Spiller Company: 001
Contact Name: ERT DESK'
Contact Phone: (212) 580-8383
DEC Memo: e2mis no 159829R. FANELLI FOUND TWO QUARTS OF UNKNOWN OIL ON 80

GALLONS OF WATER. AT THIS TIME OIL APPEARS TO BE CONTAINED AND NO SEWERS OR WATERWAYS WERE AFFECTED. THE STANDING WATER THAT IS PRESENT HAS NO MOVEMENT AND NO SEWER CONNECTIONS OR SUMPS NOTICED. ONE LIQUID SAMPLE WAS TAKEN CLEANUPPENDING LAB SAMPLE. Lab Sequence Number: 05-07356-001 MATRIX: OIL GRAB - Aroclor 1260 < 1.0 ppm,Lab Sequence Number: 05-07357-001 The sample does not match any current Con Ed standard.21-JUL-2005 09:45 HRS. ENVIR. OPER. O.S.J.DEKANCHUK EMP# 77899 REPORTS: CONFIRMED ENVIR. CREW FOSCHINO & FOSTER DBL. WASHED STRUCTURE. ENVIR. TAG REMOVED. CLEANUP COMPLETE 100%. C.HOGAN 07511.Closed. 9-23-05. GB

Remarks: COMING OFF 24 HOUR CLOCK, DUE TO LACK OF CREW: 1 OUNCE ON 80 GALLONS OF WTAER: CONED # 159829: NO TO 5 QUESTIONS

Material:

Site ID: 349557
Operable Unit ID: 1107149
Operable Unit: 01
Material ID: 2097043
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9914105
Facility Type: ER
DER Facility ID: 148067
Site ID: 176183
DEC Region: 2
Spill Date: 3/14/2000
Spill Number/Closed Date: 9914105 / 3/26/2002
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

Investigator: JHOCONNE
Referred To: Not reported
Reported to Dept: 3/14/2000
CID: 233
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Affected Persons
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 3/14/2000
Spill Record Last Update: 3/26/2002
Spiller Name: UNKNOWN
Spiller Company: UNKNOWN
Spiller Address: UNKNOWN
Spiller City,St,Zip: UNKNOWN, NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "O'CONNELL"
Remarks: con ed # 130404 spill confined to man hole on surface of 1000 gallons of water in man hole clean up pending lab results

Material:
Site ID: 176183
Operable Unit ID: 1092359
Operable Unit: 01
Material ID: 557744
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

E DESIGNATION:
Tax Lot(s): 46
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code: QN
Community District: 407
Census Tract: 383

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: P
Owner Name: K J D S REALTY INC
Lot Area: 000003880
Total Building Floor Area: 00000000875
Commercial Floor Area: 00000000875
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000875
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0040.00
Lot Depth: 0115.42
Building Frontage: 0025.00
Building Depth: 0035.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000034875
Total Assessed Value: 00000043875
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.23
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018250046
Condominium Number: 00000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

Census Tract 2: 0383
X Coordinate: 1027891
Y Coordinate: 0215364
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 46
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Exhaust stack location limitations
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: P
Owner Name: K J D S REALTY INC
Lot Area: 000003880
Total Building Floor Area: 00000000875
Commercial Floor Area: 00000000875
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000875
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0040.00
Lot Depth: 0115.42
Building Frontage: 0025.00
Building Depth: 0035.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000034875
Total Assessed Value: 00000043875
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.23
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018250046
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1027891
Y Coordinate: 0215364
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 46
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Hazardous Materials* Phase I and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: P
Owner Name: K J D S REALTY INC
Lot Area: 000003880
Total Building Floor Area: 0000000875
Commercial Floor Area: 0000000875
Office Floor Area: 0000000000
Retail Floor Area: 0000000000
Garage Floor Area: 0000000875
Storage Floor Area: 0000000000
Factory Floor Area: 0000000000
Other Floor Area: 0000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0040.00
Lot Depth: 0115.42
Building Frontage: 0025.00
Building Depth: 0035.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000034875
Total Assessed Value: 00000043875
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.23
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018250046
Condominium Number: 00000
Census Tract 2: 0383

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

X Coordinate: 1027891
Y Coordinate: 0215364
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 46
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: P
Owner Name: K J D S REALTY INC
Lot Area: 000003880
Total Building Floor Area: 00000000875
Commercial Floor Area: 00000000875
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000875
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

NEW SPOTLESS M & G SHOP (Continued)

S104510815

Number of Buildings: 00001
 Number of Floors: 001.00
 Residential Units: 00000
 Non and Residential Units: 00001
 Lot Frontage: 0040.00
 Lot Depth: 0115.42
 Building Frontage: 0025.00
 Building Depth: 0035.00
 Proximity Code: 0
 Irregular Lot Code: Y
 Lot Type: 5
 Basement Type Grade: 5
 Land Assessed Value: 00000034875
 Total Assessed Value: 00000043875
 Land Exempt Value: 00000000000
 Total Exempt Value: 00000000000
 Year Built: 1930
 Year Built Code: E
 Year Altered1: 0000
 Year Altered2: 0000
 Historic District Name: Not reported
 Landmark Name: Not reported
 Built Floor Area Ratio-Far: 0000.23
 Maximum Allowable Far: 02.00
 Borough Code: 4
 Borough Tax Block And Lot: 4018250046
 Condominium Number: 00000
 Census Tract 2: 0383
 X Coordinate: 1027891
 Y Coordinate: 0215364
 Zoning Map: 10B
 Sanborn Map: 419 028
 Tax Map: 41004
 E Designation No: Not reported
 Date of RPAD Data: 11/2005
 Date of DCAS Data: 01/2006
 Date of Zoning Data: 11/2005
 Date of Major Property Data: 11/2005
 Date of Landmark Data: 12/2005
 Date of Base Map Data: 01/2006
 Date of Mass Appraisal Data: 11/2005
 Date of Political and Adm Data: 08/2005
 Pluto-Base Map Indicator: 1

M73
East
1/4-1/2
0.333 mi.
1758 ft.

WESTERN BEEF
44-44 COLLEGE PT BLVD
FLUSHING, NY

NY LTANKS S105997581
N/A

Site 1 of 2 in cluster M

Relative:
Higher

LTANKS:
 Site ID: 83247
 Spill Number/Closed Date: 0209360 / 12/11/2003

Actual:
33 ft.

Spill Date: 12/11/2002
 Spill Cause: Tank Failure
 Spill Source: Commercial/Industrial
 Spill Class: Known release that creates potential for fire or hazard. DEC Response.
 Willing Responsible Party. Corrective action taken.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTERN BEEF (Continued)

S105997581

Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: TJDMEEO
Referred To: Not reported
Reported to Dept: 12/11/2002
CID: 390
Water Affected: Not reported
Spill Notifier: Local Agency
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 12/11/2002
Spill Record Last Update: 6/28/2006
Spiller Name: UNK
Spiller Company: WESTERN BEEF
Spiller Address: 44-44 COLLEGE POINT BL
Spiller City,St,Zip: FLUSHING, ZZ
Spiller County: 001
Spiller Contact: UNK
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 76615
DEC Memo:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DEMEO" 12/12/02 Rommel Office Duty Western Beef ordered oil for two of their locations, 500 gallons for the College Point location and 4000 gallons for another. Madison Fuel Oil Company switched the order tickets and attempted to deliver 4000 gallons to the 2000 gallon (unregistered) vaulted aboveground storage tank. At approximately 5pm on 12/11/02, Madison Oil delivered 2500 gallons before a problem was noted. Most of the oil spilled in the tank room which contained two floor drains that discharge to a sump. Oil also spilled out the vent, down the ceiling tiles and into the food store. Spills staff, DLE, DEP, FDNY and Tradewinds, Madison Fuel Oil's contractor, responded to the scene. Tradewinds was able to recover 1000 gallons from the tank. An additional 2500 gallons of total fluids (water and oil) was recovered from the floor drains, sump and tank vault. DEC and DEP pulled the sewer manhole covers but did not find more than a sheen. Flushing Creek was inspected and no impacts were found. DLE issued citations to both Western Beef and Madison Fuel Oil. Today (12/12), Spills staff is returning to the scene to ensure there are no impacts to Flushing Creek. 12/12/2002-Vought-Site visit by Vought. Store open for business and no contractor on-site. Blower fan in continuous operation with vent tube running from tank room to roof. No detectable odor in store. Flushing Creek was inspected and no impact were found. Sump remains disconnected as per DEP summons. According to Department of Fire Prevention record tank has 2,000 gal capacity. According to Larry Grossman (store manager 718-359-4900) and Robert Ciralo (Western Beef Maintenance Supervisor 718-628-2336) all directly oil impacted food was disposed of (food by leaking vent), no NYC Department of Health or Department of Agriculture site visits were performed. According to Ciralo tank dimensions suggest 2,000gal capacity and Tradewinds will be onsite tomorrow to continue cleanup. Tradewinds did not respond today because the proper container could not be supplied to handle the impacted cinderblock and wood. The

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTERN BEEF (Continued)

S105997581

Remarks: container will be on-site tomorrow so work may be continued. Ciralo also stated the tank was empty and that the building was using natural gas heat. Arthur Baldwin environmental consultant (Tradewinds 631-435-8900) was contacted and the scope of work includes sweeping up the remaining adsorbent material, powerwash and visual inspection of concrete floor for pathways to subsurface, registering of tank, decommissioning of tank, removal of tank and remaining interstitial soil and investigation of tank vault for pathways to subsurface. 12/11/03 TJDSpilled product cleaned by Tradewinds. No disposal documents submitted. Spill administratively closed.
tank failed - several hundred gallons spilled - tank is a 4,000-5,000 gallon tank - unk exact amount spilled

Material:

Site ID: 83247
Operable Unit ID: 860735
Operable Unit: 01
Material ID: 516335
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

M74
East
1/4-1/2
0.343 mi.
1810 ft.

AMOCO SERVICE STATION
49-04 COLLEGE POINT BLVD
FLUSHING, NY
Site 2 of 2 in cluster M

NY LTANKS **S106385754**
N/A

Relative:
Higher

LTANKS:
Site ID: 274118
Spill Number/Closed Date: 0400063 / 12/12/2005
Spill Date: 4/2/2004
Spill Cause: Tank Test Failure
Spill Source: Gasoline Station or other PBS Facility
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

Actual:
30 ft.

Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 4101
Investigator: KMFOLEY
Referred To: Not reported
Reported to Dept: 4/2/2004
CID: 444
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMOCO SERVICE STATION (Continued)

S106385754

UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 4/2/2004
Spill Record Last Update: 12/12/2005
Spiller Name: TUNG KIM
Spiller Company: AMOCO SERVICE STATION
Spiller Address: 49-04 COLLEGE POINT BLVD
Spiller City,St,Zip: FLUSHING, NY
Spiller County: 001
Spiller Contact: TUNG KIM
Spiller Phone: (718) 939-4694
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 222954
DEC Memo: 4/6/04 sent TTF letter to C. Wein.5/17/05 Received Line Closure and UST Removal Report dated 4/29/05. From 11/8/04-12/20/04, Gemstar installed sumps around submerged pumps, removed and replaced existing dispenser pans with deep boxes, excavated approx 125' of steel product piping and replaced with double-walled fiberglass piping, and installed electronic line leak detection systems at each containment box and tied to VeederRoot TLS-500. They also excavated and removed one 550 used oil UST and 20 abandoned 550gal USTs. Post-ex samples were taken from beneath the dispensers, along the piping run, at the waste oil tank, around the tank mat and around the former abandoned tank area. The 20 abandoned tanks were each encased in a concrete vault and located approx 5'bgs. Field evidence of petroleum impact was identified beneath the tanks (PID readings 0ppm to 7592ppm). Post-ex samples were below RSCOs. Field evidence of petroleum impact was identified beneath the used oil UST (PID reading of 1829ppm at 5'bgs). Soil was overexcavated to 8'bgs. The post-ex sample collected returned below RSCOs, except for chromium which was detected at 30ppb(within background). Soils samples collected from SS-6(2'), near the tank mat, detected concentrations of VOCs above RSCOs. Delta will delineate soil impacts and collect groundwater samples.11/29/05 Received Subsurface Hydrocarbon Assessment Report dated 11/28/05. On 9/1/05, four borings were advanced by Geoprobe, in the vicinity of the existing UST mat and the pump islands. Site constraints prevented advancement of several proposed borings. Borings were advanced to depths between 30-35'bgs. Soils were non-detect for VOCs, except for SB-1(7-8') which showed total VOCs at 277ppb(BTEX/MTBE non-detect). GW was encountered at approx 34'bgs. Eight soil samples were collected for 8260 analysis. Groundwater samples were collected from 3 of 4 borings (A macro-core sampling unit was broken during the advancement of SB-2 and obstructed the boring). Total BTEX concentrations ranged from 0.27ppb(SB-4/Water) to 3ppb(SB-1/Water). No MTBE was detected. 12/12/05 NFA issued.

Remarks: VACU TECHT TEST FAILED:

Material:
Site ID: 274118
Operable Unit ID: 884531
Operable Unit: 01
Material ID: 494856
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMOCO SERVICE STATION (Continued)

S106385754

Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 274118
Operable Unit ID: 884531
Operable Unit: 01
Material ID: 1521234
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 274118
Spill Tank Test: 1529123
Tank Number: Not reported
Tank Size: 550
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

**N75
NNW
1/4-1/2
0.347 mi.
1834 ft.**

**ET AUTO PARTS INC
126-93 WILLETS POINT BLVD
CORONA, NY 11368**

**NY SWF/LF S109527884
NY E DESIGNATION N/A**

Site 1 of 7 in cluster N

**Relative:
Higher**

SWF/LF:

Flag: INACTIVE
Region Code: 2
Phone Number: 7184572704
Owner Name: Meir Korlashvili
Owner Type: Private
Owner Address: 126-93 Willets Pt. Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7184572704
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported

**Actual:
10 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Active: No
East Coordinate: 597734
North Coordinate: 4512562
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

E DESIGNATION:

Tax Lot(s): 37
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: Z9
Land Use Category: Not reported
Number of Easements: 0
Owner, Type of Code: P
Owner Name: KORALASHVILA, RAFI
Lot Area: 000005491
Total Building Floor Area: 00000005400
Commercial Floor Area: 00000005400
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000005400
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0085.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Lot Depth: 0104.00
Building Frontage: 0035.00
Building Depth: 0069.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 00000054000
Total Assessed Value: 00000096750
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.98
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018250037
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1027969
Y Coordinate: 0215552
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 37
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Exhaust stack location limitations
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Zone District 2:	Not reported
Commercial Overlay1:	Not reported
Commercial Overlay2:	Not reported
Special Purpose District1:	Not reported
Special Purpose District2:	Not reported
All Components1:	M3-1
All Components2:	Not reported
Split Boundary Indicator:	N
Building Class:	Z9
Land Use Category:	Not reported
Number of Easements:	0
Owner, Type of Code:	P
Owner Name:	KORALASHVILA, RAFI
Lot Area:	000005491
Total Building Floor Area:	00000005400
Commercial Floor Area:	00000005400
Office Floor Area:	00000000000
Retail Floor Area:	00000000000
Garage Floor Area:	00000000000
Storage Floor Area:	00000000000
Factory Floor Area:	00000000000
Other Floor Area:	00000005400
Floor Area,Total Bld Source Code:	7
Number of Buildings:	00001
Number of Floors:	001.00
Residential Units:	00000
Non and Residential Units:	00001
Lot Frontage:	0085.00
Lot Depth:	0104.00
Building Frontage:	0035.00
Building Depth:	0069.00
Proximity Code:	0
Irregular Lot Code:	Y
Lot Type:	3
Basement Type Grade:	5
Land Assessed Value:	00000054000
Total Assessed Value:	00000096750
Land Exempt Value:	00000000000
Total Exempt Value:	00000000000
Year Built:	1930
Year Built Code:	E
Year Altered1:	0000
Year Altered2:	0000
Historic District Name:	Not reported
Landmark Name:	Not reported
Built Floor Area Ratio-Far:	0000.98
Maximum Allowable Far:	02.00
Borough Code:	4
Borough Tax Block And Lot:	4018250037
Condominium Number:	00000
Census Tract 2:	0383
X Coordinate:	1027969
Y Coordinate:	0215552
Zoning Map:	10B
Sanborn Map:	419 028
Tax Map:	41004
E Designation No:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 37
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Hazardous Materials* Phase I and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: Z9
Land Use Category: Not reported
Number of Easements: 0
Owner, Type of Code: P
Owner Name: KORALASHVILA, RAFI
Lot Area: 000005491
Total Building Floor Area: 00000005400
Commercial Floor Area: 00000005400
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000005400
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0085.00
Lot Depth: 0104.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Building Frontage: 0035.00
Building Depth: 0069.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 00000054000
Total Assessed Value: 00000096750
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.98
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018250037
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1027969
Y Coordinate: 0215552
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 37
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1012
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: Z9
Land Use Category: Not reported
Number of Easements: 0
Owner, Type of Code: P
Owner Name: KORALASHVILA, RAFI
Lot Area: 000005491
Total Building Floor Area: 0000005400
Commercial Floor Area: 0000005400
Office Floor Area: 0000000000
Retail Floor Area: 0000000000
Garage Floor Area: 0000000000
Storage Floor Area: 0000000000
Factory Floor Area: 0000000000
Other Floor Area: 0000005400
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0085.00
Lot Depth: 0104.00
Building Frontage: 0035.00
Building Depth: 0069.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 00000054000
Total Assessed Value: 00000096750
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.98
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018250037
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1027969
Y Coordinate: 0215552
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ET AUTO PARTS INC (Continued)

S109527884

Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

76
NNW
1/4-1/2
0.364 mi.
1922 ft.

EXPRESS USED AUTO PARTS INC
126-16 37TH AVE
CORONA, NY 11368

NY SWF/LF **S108145854**
N/A

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597582
North Coordinate: 4512507
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
11 ft.

N77
NNW
1/4-1/2
0.366 mi.
1934 ft.

BCA AUTO PARTS INC
126-43 37TH AVE
CORONA, NY 11368
Site 2 of 7 in cluster N

NY SWF/LF **S108145698**
N/A

Relative:
Higher

SWF/LF:
Flag: ACTIVE
Region Code: 2
Phone Number: 7186721372
Owner Name: BCA Auto Parts Inc
Owner Type: Private

Actual:
11 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BCA AUTO PARTS INC (Continued)

S108145698

Owner Address: 126-43 37th Avenue
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7186721372
Contact Name: Hafeez Khan
Contact Address: 126-43 37th Avenue
Contact Addr2: Not reported
Contact City,St,Zip: Corona, NY 11368
Contact Email: Not reported
Contact Phone: 7186721372
Activity Desc: Vehicle Dismantling
Activity Number: [7092933]
Active: Yes
East Coordinate: 597622
North Coordinate: 4512557
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**N78
NNW
1/4-1/2
0.367 mi.
1939 ft.**

**GERMAN DIAZ AUTO REPAIR
126-53 37TH AVE
CORONA, NY 11368
Site 3 of 7 in cluster N**

**NY SWF/LF S108145882
N/A**

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597756
North Coordinate: 4516184
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
11 ft.**

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

N79
NNW
1/4-1/2
0.369 mi.
1950 ft.

ASCOR SCRAP METAL INC.
127-08 WILLETS PT BLVD
CORONA, NY

NY LTANKS **S100153401**
 N/A

Site 4 of 7 in cluster N

Relative:
Higher

LTANKS:

Actual:
10 ft.

Site ID: 152800
 Spill Number/Closed Date: 9107763 / 10/22/1991
 Spill Date: 10/18/1991
 Spill Cause: Tank Test Failure
 Spill Source: Commercial/Industrial
 Spill Class: Not reported
 Cleanup Ceased: 10/22/1991
 Cleanup Meets Standard: True
 SWIS: 4101
 Investigator: TOMASELLO
 Referred To: Not reported
 Reported to Dept: 10/21/1991
 CID: Not reported
 Water Affected: FLUSHING BAY
 Spill Notifier: Local Agency
 Last Inspection: Not reported
 Recommended Penalty: False
 UST Involvement: False
 Remediation Phase: 0
 Date Entered In Computer: 10/23/1991
 Spill Record Last Update: 1/26/1998
 Spiller Name: Not reported
 Spiller Company: ASCOR SCRAP METAL
 Spiller Address: Not reported
 Spiller City,St,Zip: ZZ
 Spiller County: 001
 Spiller Contact: Not reported
 Spiller Phone: Not reported
 Spiller Extention: Not reported
 DEC Region: 2
 DER Facility ID: 283009
 DEC Memo: Not reported
 Remarks: WASTE OIL ACCUMULATING OVER YEARS. DEP INVESTIGATING.

Material:

Site ID: 152800
 Operable Unit ID: 958226
 Operable Unit: 01
 Material ID: 419952
 Material Code: 0022
 Material Name: Waste Oil/Used Oil
 Case No.: Not reported
 Material FA: Petroleum
 Quantity: -1
 Units: Pounds
 Recovered: No
 Resource Affected: Not reported
 Oxygenate: False

Tank Test:

Site ID: 152800

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASCOR SCRAP METAL INC. (Continued)

S100153401

Spill Tank Test: 1539193
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

**N80
NNW
1/4-1/2
0.374 mi.
1974 ft.**

**PANAJOTIS AUTO BODY SHOP
127-11 WILLETS POINT BLVD
CORONA, NY 11368**

**NY SWF/LF S109527529
NY E DESIGNATION N/A**

Site 5 of 7 in cluster N

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 6463387039
Owner Name: Mark Staka
Owner Type: Private
Owner Address: 127-11 Willets Point Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 6463387039
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: [7088502]
Active: No
East Coordinate: 597750
North Coordinate: 4512608
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
10 ft.**

E DESIGNATION:

Tax Lot(s): 1
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code: QN
Community District: 407

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANAJOTIS AUTO BODY SHOP (Continued)

S109527529

Census Tract: 383
Census Block: 1011
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: Not reported
Owner Name: IRENE PRESTI
Lot Area: 000010304
Total Building Floor Area: 0000003680
Commercial Floor Area: 0000003680
Office Floor Area: 0000000000
Retail Floor Area: 0000000500
Garage Floor Area: 0000003180
Storage Floor Area: 0000000000
Factory Floor Area: 0000000000
Other Floor Area: 0000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00005
Lot Frontage: 0181.00
Lot Depth: 0133.33
Building Frontage: 0030.00
Building Depth: 0020.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 0000092700
Total Assessed Value: 00000162000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1985
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.36
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018320001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANAJOTIS AUTO BODY SHOP (Continued)

S109527529

Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028021
Y Coordinate: 0215823
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 1
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Exhaust stack location limitations
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1011
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: Not reported
Owner Name: IRENE PRESTI
Lot Area: 000010304
Total Building Floor Area: 00000003680
Commercial Floor Area: 00000003680
Office Floor Area: 00000000000
Retail Floor Area: 00000000500
Garage Floor Area: 00000003180
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANAJOTIS AUTO BODY SHOP (Continued)

S109527529

Other Floor Area: 00000000000
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00005
Lot Frontage: 0181.00
Lot Depth: 0133.33
Building Frontage: 0030.00
Building Depth: 0020.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 00000092700
Total Assessed Value: 00000162000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1985
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.36
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018320001
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028021
Y Coordinate: 0215823
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 1
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Hazardous Materials* Phase and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 383

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANAJOTIS AUTO BODY SHOP (Continued)

S109527529

Census Block: 1011
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: Not reported
Owner Name: IRENE PRESTI
Lot Area: 000010304
Total Building Floor Area: 00000003680
Commercial Floor Area: 00000003680
Office Floor Area: 00000000000
Retail Floor Area: 00000000500
Garage Floor Area: 00000003180
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00005
Lot Frontage: 0181.00
Lot Depth: 0133.33
Building Frontage: 0030.00
Building Depth: 0020.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 00000092700
Total Assessed Value: 00000162000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1985
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.36
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018320001
Condominium Number: 00000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANAJOTIS AUTO BODY SHOP (Continued)

S109527529

Census Tract 2: 0383
X Coordinate: 1028021
Y Coordinate: 0215823
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 1
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1011
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: G9
Land Use Category: 07
Number of Easements: 0
Owner, Type of Code: Not reported
Owner Name: IRENE PRESTI
Lot Area: 000010304
Total Building Floor Area: 00000003680
Commercial Floor Area: 00000003680
Office Floor Area: 00000000000
Retail Floor Area: 00000000500
Garage Floor Area: 00000003180
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANAJOTIS AUTO BODY SHOP (Continued)

S109527529

Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00005
Lot Frontage: 0181.00
Lot Depth: 0133.33
Building Frontage: 0030.00
Building Depth: 0020.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 3
Basement Type Grade: 5
Land Assessed Value: 00000092700
Total Assessed Value: 00000162000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1985
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.36
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018320001
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028021
Y Coordinate: 0215823
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

**N81
NNW
1/4-1/2
0.374 mi.
1975 ft.**

**A & D USED AUTO PARTS & CARS INC
12711 WILLETS POINT BLVD
CORONA, NY 11368
Site 6 of 7 in cluster N**

**NY SWF/LF S108145599
N/A**

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported

**Actual:
10 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A & D USED AUTO PARTS & CARS INC (Continued)

S108145599

Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597750
North Coordinate: 4512608
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

82
West
1/4-1/2
0.379 mi.
2001 ft.

FLUSHING MEADOW PARK
OLMSTEAD CENTER
FLUSHING, NY

NY LTANKS **S102233295**
N/A

Relative:
Higher

LTANKS:

Actual:
9 ft.

Site ID: 209292
Spill Number/Closed Date: 9515607 / 11/22/1996
Spill Date: 3/5/1996
Spill Cause: Tank Failure
Spill Source: Tank Truck
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: SULLIVAN
Referred To: Not reported
Reported to Dept: 3/5/1996
CID: 312
Water Affected: Not reported
Spill Notifier: Local Agency
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 3/5/1996
Spill Record Last Update: 1/28/1998
Spiller Name: Not reported
Spiller Company: TURNER CONSTRUCTION CO.
Spiller Address: DEMECO CONSTUCTION
Spiller City,St,Zip: 718-892-2505, ZZ
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING MEADOW PARK (Continued)

S102233295

Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 173561
DEC Memo: Not reported
Remarks: fuel tank ruptured on tanker truck inside the park - cleanup not started as of yet

Material:

Site ID: 209292
Operable Unit ID: 1026686
Operable Unit: 01
Material ID: 355727
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 100
Units: Gallons
Recovered: 100
Resource Affected: Not reported
Oxygenate: False

Tank Test:

**N83
NNW
1/4-1/2
0.380 mi.
2005 ft.**

**TURBO AUTO SALES INC
127-18 WILLETS POINT BLVD
FLUSHING, NY 11368**

**NY SWF/LF S109527638
NY E DESIGNATION N/A**

Site 7 of 7 in cluster N

**Relative:
Higher**

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7183357157
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Haim Korashvili
Contact Address: 127-18 Willets Point Blvd
Contact Addr2: Not reported
Contact City,St,Zip: Flushing, NY 11368
Contact Email: Not reported
Contact Phone: 7183357157
Activity Desc: Vehicle Dismantling
Activity Number: Not reported
Active: No
East Coordinate: 597757
North Coordinate: 4512627
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported

**Actual:
10 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Authorization Date: Not reported
Expiration Date: Not reported

E DESIGNATION:

Tax Lot(s): 179
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: YLRM CORP.
Lot Area: 000002000
Total Building Floor Area: 00000003200
Commercial Floor Area: 00000003200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000003200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0020.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0080.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Land Assessed Value:	00000015840
Total Assessed Value:	00000054000
Land Exempt Value:	00000000000
Total Exempt Value:	00000000000
Year Built:	1989
Year Built Code:	Not reported
Year Altered1:	0000
Year Altered2:	0000
Historic District Name:	Not reported
Landmark Name:	Not reported
Built Floor Area Ratio-Far:	0001.60
Maximum Allowable Far:	02.00
Borough Code:	4
Borough Tax Block And Lot:	4018330179
Condominium Number:	00000
Census Tract 2:	0383
X Coordinate:	1028192
Y Coordinate:	0215671
Zoning Map:	10B
Sanborn Map:	419 028
Tax Map:	41004
E Designation No:	Not reported
Date of RPAD Data:	11/2005
Date of DCAS Data:	01/2006
Date of Zoning Data:	11/2005
Date of Major Property Data:	11/2005
Date of Landmark Data:	12/2005
Date of Base Map Data:	01/2006
Date of Mass Appraisal Data:	11/2005
Date of Political and Adm Data:	08/2005
Pluto-Base Map Indicator:	1
Tax Lot(s):	179
E-No:	E-214
Effective Date:	11/13/2008
Satisfaction Date:	Not reported
Ceqr Number:	07DME014Q
Ulurp Number:	080381ZMQ
Zoning Map No:	10a 10b
Description:	Exhaust stack location limitations
Borough Code:	QN
Community District:	407
Census Tract:	383
Census Block:	1006
School District:	25
City Council District:	21
Fire Company:	L129
Health Area:	43
Police Precinct:	110
Zone District 1:	M3-1
Zone District 2:	Not reported
Commercial Overlay1:	Not reported
Commercial Overlay2:	Not reported
Special Purpose District1:	Not reported
Special Purpose District2:	Not reported
All Components1:	M3-1
All Components2:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Split Boundary Indicator: N
Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: YLRM CORP.
Lot Area: 000002000
Total Building Floor Area: 00000003200
Commercial Floor Area: 00000003200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000003200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0020.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0080.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000015840
Total Assessed Value: 00000054000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1989
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0001.60
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330179
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028192
Y Coordinate: 0215671
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 179
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Hazardous Materials* Phase and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: YLRM CORP.
Lot Area: 000002000
Total Building Floor Area: 00000003200
Commercial Floor Area: 00000003200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000003200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0020.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0080.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000015840

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Total Assessed Value: 00000054000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1989
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0001.60
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330179
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028192
Y Coordinate: 0215671
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 179
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: YLRM CORP.
Lot Area: 000002000
Total Building Floor Area: 00000003200
Commercial Floor Area: 00000003200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000003200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0020.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0080.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000015840
Total Assessed Value: 00000054000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1989
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0001.60
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330179
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028192
Y Coordinate: 0215671
Zoning Map: 10B
Sanborn Map: 419 028
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TURBO AUTO SALES INC (Continued)

S109527638

Pluto-Base Map Indicator: 1

**O84
NE
1/4-1/2
0.388 mi.
2047 ft.**

**FLUSHING INDUSTRIAL PARK
40-22 COLLEGE POINT BLVD
FLUSHING, NY**

**NY LTANKS
NY Spills**

**S107789225
N/A**

Site 1 of 2 in cluster O

**Relative:
Higher**

LTANKS:

**Actual:
21 ft.**

Site ID: 370289
Spill Number/Closed Date: 0606870 / 10/2/2006
Spill Date: 9/14/2006
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: HRPATEL
Referred To: Not reported
Reported to Dept: 9/14/2006
CID: 406
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 9/15/2006
Spill Record Last Update: 10/2/2006
Spiller Name: STEVE GRENS
Spiller Company: MUSS BROOKLYN DEVELOPMEN
Spiller Address: 40-22 COLLEGE POINT BLVD.
Spiller City,St,Zip: FLUSHING, NY
Spiller County: 001
Spiller Contact: STEVE GRENS
Spiller Phone: (914) 806-5650
Spiller Extention: CELL
DEC Region: 2
DER Facility ID: 313210
DEC Memo: AKRF is already remediating the site.They know the standard routine - excavate, dispose with manifest, endpoint samples, submit report.10/02/06-Hiralkumar Patel. spoke with Steve. he is doing remediation under brownfield program and during this he found UST enclosed in concrete. but this concrete had cracks and through which water was flowing in and out of concrete vault. project manager for this brownfield case is Ioana Munteanu. he gave me brownfield project numbers as:BCP #: C241078BCP #: C241079case closed. will be investigated under brownfield project.

Remarks:

Cleaned the UST in place then noticed groundwater starting to come back in the tank. The tank was encased in concrete. The soil surrounding the tank was contaminated. The contaminated soil has been removed and stock piled.

Material:

Site ID: 370289

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING INDUSTRIAL PARK (Continued)

S107789225

Operable Unit ID: 1128105
Operable Unit: 01
Material ID: 2117715
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 370289
Spill Tank Test: 1550277
Tank Number: Not reported
Tank Size: 550
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Watchdog
Last Modified: 9/15/2006
Test Method: Unknown

SPILLS:

Facility ID: 0602684
Facility Type: ER
DER Facility ID: 313210
Site ID: 365226
DEC Region: 2
Spill Date: 6/9/2006
Spill Number/Closed Date: 0602684 / 11/23/2007
Spill Cause: Other
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: dcwalsh
Referred To: Not reported
Reported to Dept: 6/9/2006
CID: 44
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 6/9/2006
Spill Record Last Update: 11/23/2007
Spiller Name: STEVEN GRENS
Spiller Company: BROWNSFIELD PROJECT
Spiller Address: 40-22 COLLEGE POINT BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING INDUSTRIAL PARK (Continued)

S107789225

Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 001
Contact Name: STEVEN GRENS
Contact Phone: (914) 806-5650 CELL
DEC Memo: 06/09/06 Sharif Rahman- Brown field site-found four 550 gallons gasoline tank,vaulted in concrete slab, came across contaminated soil.
Not reported
Remarks: REMOVING UNDEGROUND STORAGE TANK AND FOUND DISCOLORED SOIL: PETROLUEM ODORS ALSO

Material:

Site ID: 365226
Operable Unit ID: 1123235
Operable Unit: 01
Material ID: 2112709
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0601739
Facility Type: ER
DER Facility ID: 313210
Site ID: 364039
DEC Region: 2
Spill Date: 5/16/2006
Spill Number/Closed Date: 0601739 / 4/21/2009
Spill Cause: Unknown
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: dcwalsh
Referred To: Not reported
Reported to Dept: 5/16/2006
CID: 408
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 5/16/2006
Spill Record Last Update: 4/21/2009
Spiller Name: KATE BRUNNER
Spiller Company: FLUSHING INDUSTRIAL PARK
Spiller Address: 40-22 COLLEGE POINT BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING INDUSTRIAL PARK (Continued)

S107789225

Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 001
Contact Name: KATE BRUNNER
Contact Phone: (917) 612-3990
DEC Memo: 05/17/06-Vought-Spoke to DEC Munteanu-Ramnic and she requested that spill be assigned to her and left open. Spill assigned not assigned to Munteanu-Ramnic. Spill assigned to Dan Walsh (supervisor).4/21/09: Site cleaned up under Brownfield Cleanup Program (site no. C241050, C241078 and C241079). Certificate of Completion issued 12/28/07. In site management phase. Close. (JHO)
Remarks: DISCOVERED DURING TANK REMOVAL, THIS IS HISTORIC, CLEAN UP IS IN PROGRESS, CREAMER ENVIRONMENTAL IS DOING THE CLEAN UP. THE TANK SIZE 550 GALLONS AND THERE ARE TWO OF THEM, THEY WILL BE REMOVED.IOANA RAMNIC IS THE PROJECT MANAGER

Material:

Site ID: 364039
Operable Unit ID: 1122091
Operable Unit: 01
Material ID: 2111578
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0600907
Facility Type: ER
DER Facility ID: 313210
Site ID: 363013
DEC Region: 2
Spill Date: 4/24/2006
Spill Number/Closed Date: 0600907 / 10/26/2007
Spill Cause: Equipment Failure
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: dcwalsh
Referred To: Not reported
Reported to Dept: 4/24/2006
CID: 444
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING INDUSTRIAL PARK (Continued)

S107789225

Date Entered In Computer: 4/24/2006
Spill Record Last Update: 10/26/2007
Spiller Name: STEVEN GRENS
Spiller Company: INDUSTRIAL SITE
Spiller Address: 40-22 COLLEGE POINT BLVD
Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 001
Contact Name: STEVEN GRENS
Contact Phone: (914) 806-5650 CELL
DEC Memo: 4/24/2006 Sangesland spoke to Steve Grens of AKRF (cell 914-806-5650)Site is in the Brownfields Program.Two 10,000 gal USTs (installed 1917) were found with 1" to 2" holes. During tank removal, oil/water sludge poured out into the pit. This sludge is now being pumped out and disposed of. Contractor will excavate out contaminated soil and dispose with manifest. End point samples will be taken after excavation.10/26/07 - closed by martinkat, based on the following:October 30, 2007Ms. Ioana Munteanu-RamnicNew York State Department of Environmental ConservationDivision of Environmental Remediation, Region 247-40 21st StreetLong Island City, NY 11101-5407Re: Spill Closure ReportFlushing Industrial Park, Parcel 1, Flushing, New YorkBCP Site No. C241051Spill No. 0600907Dear Ms. Munteanu-Ramnic:AKRF, Inc. (AKRF) is pleased to present this report summarizing the closure of a spill reported at 40-22 College Point Boulevard in Flushing, New York (the Property). The subject Property consists of four Parcels participating in the New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP): Flushing Industrial Park (Eastern), Parcel 1 (BCP Site No. C241051); Flushing Industrial Park (Western), Parcel 2 (BCP Site No. C241078); Flushing Industrial Park (Western Waterfront), Parcel 3 (BCP Site No. C241079); and Flushing Industrial Park (Flushing River), Parcel 4 (BCP Site No. C241080).On April 25, 2006, during removal of two 10,000-gallon fuel oil underground storage tanks (USTs), a spill was reported due to apparent petroleum like sludge noted on the water table. The tanks were located on the western portion of Flushing Industrial Park, Parcel 1. Provisions for tank removal and spill cleanup were included in the NYSDEC-approved Remedial Action Work Plan for Parcel 1. The RAWP established Site-Specific Action Levels for use in determining sufficiency of remedial actions. The remediation of Spill No. 0600907 was performed under the RAWP, and the remediation of the entirety of Parcel 1 will be documented in the forthcoming Final Engineering Report (FER). The FER includes figures, tables, laboratory analytical reports, and photographs of these events.Spill Closure SummaryOn April 19, 2006, two 10,000-gallon USTs were encountered. Following tank removal, corrosion holes up to 2 inches in diameter were noted on the sidewalls and bottoms of both USTs. A sludge-like layer with a petroleum-like odor was noted on the water table; therefore, a spill was reported to the NYSDEC Spills Hotline (Spill No. 0600907) on April 25, 2006. No light non-aqueous phase liquid (LNAPL) was measurable on the groundwater in the excavation using the oil/water interface probe. The tank excavation was kept open for several days while oil absorbent pads were used to soak up the sludge layer. Groundwater was pumped from the open excavation into the on-site water treatment system on April 21,Spill Closure Report (Spill No. 0600907) 2 Flushing Industrial Park, Parcel 1Flushing, New York24, and 27, 2006, and the sludge layer did not reappear. The soil and portions of the tank vault exhibiting petroleum-like staining and/or

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FLUSHING INDUSTRIAL PARK (Continued)

S107789225

odors were directly loaded into trucks for disposal as non-hazardous waste. Excavation continued horizontally to a depth of several feet below the water table, and laterally until no evidence of contamination was apparent on the soil. The contaminated soil was excavated and disposed of off-site. The tanks were cleaned and recycled as scrap metal. Eight perimeter endpoint soil samples (UST-x-3 to UST-x-10) were collected on April 27 and 28, 2006, for analysis of NYSDEC Spill Technology and Remediation Series (STARS)-list volatile organic compounds (VOCs), STARS-list semivolatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs). The endpoint sample concentrations were less than the applicable SSALs. Under the BCP, post-remediation groundwater sampling is being conducted on Parcels 1, 2 and 3 to assess the performance of the remedy Property-wide. Based on the remedial activities conducted, and on the analytical results, AKRF requests that the NYSDEC grant closure with respect to Spill No. 0600907. Please contact Kate Brunner at (646) 388-9525 with any questions or concerns. Sincerely yours, AKRF, Inc. Marcus Simons Kathleen Brunner Senior Vice President Technical Director

Remarks: HOLES IN BOTTOM OF TANK: 10,000 GALLON ABOUT 1 FOOT OF SLUDGE,

Material:

Site ID: 363013
 Operable Unit ID: 1121082
 Operable Unit: 01
 Material ID: 2110566
 Material Code: 0001A
 Material Name: #2 Fuel Oil
 Case No.: Not reported
 Material FA: Petroleum
 Quantity: Not reported
 Units: Gallons
 Recovered: No
 Resource Affected: Not reported
 Oxygenate: False

Tank Test:

85
 ENE
 1/4-1/2
 0.390 mi.
 2057 ft.

132-40 SANFORD AVE
 132-40 SANFORD AVE
 QUEENS, NY

NY LTANKS S10599030
 N/A

Relative:
 Higher

LTANKS:

Site ID: 236990
 Spill Number/Closed Date: 0301843 / 1/24/2006
 Spill Date: 5/21/2003
 Spill Cause: Tank Failure
 Spill Source: Private Dwelling
 Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
 Cleanup Ceased: Not reported
 Cleanup Meets Standard: False
 SWIS: 4101
 Investigator: MJCRUDEN
 Referred To: Not reported

Actual:
 33 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

132-40 SANFORD AVE (Continued)

S105999030

Reported to Dept: 5/21/2003
CID: 205
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 5/21/2003
Spill Record Last Update: 4/24/2006
Spiller Name: MR ELPIGIO
Spiller Company: Not reported
Spiller Address: 132-40 SANFORD AVE
Spiller City,St,Zip: QUEENS, NY
Spiller County: 001
Spiller Contact: CALLER
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 195241
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SAWYER"5/21/03 TIPPLE UPDATING/ DEMEO DID SITE INSPECTION/PETROLEUM TANK CLEANERS DOING CLEANUPCONTAMINATED SOIL LETTER SENT TO BLD. OWNERSteve King-service rep from Hess- said fill line ruptured contaminated soil around fill line.Mgmt Agent said they would take care of cleanup.1/7/04-Vought-Spill transferred from Vought to Sawyer.Cris Sawyer is case manager for this spill.4/30/2004 Sangesland sent out a follow up letter to the property manager requesting closure documentation.6/10/04 tipple updating////ABC doing cleanup, not PTC.1/12/06 - called Joe Rooney and left message. Sent followup letter with spill report and May 21, 2003 Sangesland as attachments to request assistance in closing this spill. SPILL CLOSED ACCORDING 2005-06 SPILL CLOSURE INITIATIVE GUIDANCE. MR. ROONEY SUBMITTED DOCUMENTATION OF REMOVAL PERFORMED IN 2003.

Remarks: tank ruptured. cleanup to be started.

Material:
Site ID: 236990
Operable Unit ID: 869862
Operable Unit: 01
Material ID: 562857
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 50
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

P86 **H & S REPAIR CORP**
North **127-27 WILLETS POINT BLVD**
1/4-1/2 **CORONA, NY 11368**
0.395 mi.
2084 ft. **Site 1 of 5 in cluster P**

NY SWF/LF **S108145893**
NY Spills **N/A**

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7187794156
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Steve Viera
Contact Address: 88-25 Lyman Street
Contact Addr2: Not reported
Contact City,St,Zip: Bellerose, NY 11427
Contact Email: hsauto127@aol.com
Contact Phone: 7187794156
Activity Desc: Vehicle Dismantling
Activity Number: [7099850]
Active: No
East Coordinate: 597765
North Coordinate: 4512652
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
10 ft.

SPILLS:

Facility ID: 9106802
Facility Type: ER
DER Facility ID: 259090
Site ID: 321627
DEC Region: 2
Spill Date: 9/11/1991
Spill Number/Closed Date: 9106802 / 9/24/1991
Spill Cause: Housekeeping
Spill Class: Not reported
SWIS: 4101
Investigator: GELLER
Referred To: Not reported
Reported to Dept: 9/24/1991
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Local Agency
Cleanup Ceased: 9/24/1991
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

H & S REPAIR CORP (Continued)

S108145893

Date Entered In Computer: 9/30/1991
Spill Record Last Update: 9/30/2004
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: ***Update***, ZZ
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Not reported
Remarks: ISSUED COMMISSIONER'S MEMO TO CLEAN UP.

Material:

Site ID: 321627
Operable Unit ID: 961049
Operable Unit: 01
Material ID: 422478
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

P87
North
1/4-1/2
0.399 mi.
2108 ft.

LINCOLN USED AUTO PARTS & CARS INC
12732 WILLETS POINT BLVD
CORONA, NY 11368

NY SWF/LF S108758393
N/A

Site 2 of 5 in cluster P

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7184587522
Owner Name: Zura Davara
Owner Type: Private
Owner Address: 127-32 Willets Point Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7189304696
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: [7083916]
Active: No
East Coordinate: 597799
North Coordinate: 4512656

Actual:
10 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LINCOLN USED AUTO PARTS & CARS INC (Continued)

S108758393

Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

P88
North
1/4-1/2
0.411 mi.
2169 ft.

EIGHTEEN AUTO PARTS INC
127-40 WILLETS POINT BLVD
CORONA, NY 11368

NY SWF/LF
NY Spills
NY E DESIGNATION

S109527808
N/A

Site 3 of 5 in cluster P

Relative:
Higher

SWF/LF:

Actual:
10 ft.

Flag: ACTIVE
Region Code: 2
Phone Number: 7183358624
Owner Name: Yosef Korashvili
Owner Type: Private
Owner Address: 141-22 71st Avenue
Owner Addr2: Not reported
Owner City,St,Zip: NY 11367
Owner Email: ajkoral@msn.com
Owner Phone: 7183358624
Contact Name: Yosef Korashvili
Contact Address: 141-22 71st Avenue
Contact Addr2: Not reported
Contact City,St,Zip: Corona, NY 11367
Contact Email: ajkoral@MSN.com
Contact Phone: 7183358624
Activity Desc: Vehicle Dismantling
Activity Number: [7053833]
Active: Yes
East Coordinate: 597810
North Coordinate: 4512687
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

SPILLS:

Facility ID: 0007542
Facility Type: ER
DER Facility ID: 29882
Site ID: 157918
DEC Region: 2
Spill Date: 9/27/2000
Spill Number/Closed Date: 0007542 / 9/13/2010
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: SFRAHMAN
Referred To: Not reported
Reported to Dept: 9/27/2000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

CID: 312
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: DEC
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/27/2000
Spill Record Last Update: 9/13/2010
Spiller Name: JOSEPH
Spiller Company: 18 AUTO PARTS INC
Spiller Address: 127-40 WILLETT POINT BLVD
Spiller City,St,Zip: CORONA, NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DEMEMO"4/15/04 TJDRAP prepared by Berninger reviewed and conditionally approved. Approval letter mailed.3/23/05 - Austin - Transferred from DeMeo to Tibbe - end3/23/05 - Austin - Transferred from DeMeo to Rahman, for temp. tracking purposes - end06/27/05-SR// Sent a letter.05/15/06 Sharif Rahman- I spoke with Walter Berninger @ 631-589-6521. He will provide DEC a recent status of what has been done after the 06/2004 RAP was approved.12/19/06-Rahman-The original property owner made Eighteen Auto Parts get off of this property and closed off the access.Now, Berninger Environmental is not allowed to perform any remedial work on that property.03/31/09 Spoke with Walter Berninger(BEI).He thinks the property might have been taken over by NYC, in that case NYC would take the responsibility of remediating the site.Next step: a site visit to see the current status and find out NYC contact for the site.(sr)06/29/10 performed site visit today.Eighteen Auto still runs the business at the site.The site is divided into two parcels.At one portion, Eighteen Auto runs the business.Other portion of the site is locked and Eighteen has no access to that side.Eighteen needs to investigate ground water quality on their side.I explained it to shop owner Joseph. He told me that he will contact BEI to perform the test.(sr)09/13/10 Berninger Environmental,Inc has been retained by Eighteen Auto Parts to perform the ground water sampling on site.One gw sample was taken from the existing well and two other samples were taken by installing borings.Site map provided.VOCs and SVOCs were detected slightly above the TAGM limit.Considering the industrial nature of the neighborhood, no further actions are recommended by Berninger Environmental. Case closed.(sr)
Remarks: from auto dismantaling
Material:
Site ID: 157918
Operable Unit ID: 830162
Operable Unit: 01
Material ID: 545079
Material Code: 0015
Material Name: Motor Oil
Case No.: Not reported
Material FA: Petroleum

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

E DESIGNATION:

Tax Lot(s): 300
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E1
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: NYC INDUSTRIAL DEV AG
Lot Area: 000173389
Total Building Floor Area: 00000109200
Commercial Floor Area: 00000109200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000109200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0900.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Lot Depth: 0300.00
Building Frontage: 0190.00
Building Depth: 0260.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00001012500
Total Assessed Value: 00002070000
Land Exempt Value: 00001012500
Total Exempt Value: 00002070000
Year Built: 1972
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.63
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330300
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028298
Y Coordinate: 0215926
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 300
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Exhaust stack location limitations
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E1
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: NYC INDUSTRIAL DEV AG
Lot Area: 000173389
Total Building Floor Area: 00000109200
Commercial Floor Area: 00000109200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000109200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0900.00
Lot Depth: 0300.00
Building Frontage: 0190.00
Building Depth: 0260.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00001012500
Total Assessed Value: 00002070000
Land Exempt Value: 00001012500
Total Exempt Value: 00002070000
Year Built: 1972
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.63
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330300
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028298
Y Coordinate: 0215926
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 300
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Hazardous Materials* Phase and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E1
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: NYC INDUSTRIAL DEV AG
Lot Area: 000173389
Total Building Floor Area: 00000109200
Commercial Floor Area: 00000109200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000109200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area, Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0900.00
Lot Depth: 0300.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Building Frontage: 0190.00
Building Depth: 0260.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00001012500
Total Assessed Value: 00002070000
Land Exempt Value: 00001012500
Total Exempt Value: 00002070000
Year Built: 1972
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.63
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330300
Condominium Number: 00000
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Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 300
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E1
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: NYC INDUSTRIAL DEV AG
Lot Area: 000173389
Total Building Floor Area: 00000109200
Commercial Floor Area: 00000109200
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000109200
Factory Floor Area: 00000000000
Other Floor Area: 00000000000
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0900.00
Lot Depth: 0300.00
Building Frontage: 0190.00
Building Depth: 0260.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00001012500
Total Assessed Value: 00002070000
Land Exempt Value: 00001012500
Total Exempt Value: 00002070000
Year Built: 1972
Year Built Code: Not reported
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.63
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330300
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028298
Y Coordinate: 0215926
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EIGHTEEN AUTO PARTS INC (Continued)

S109527808

Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Q89
NNE
1/4-1/2
0.413 mi.
2180 ft.

KOREAN MARKET
39-08 JANET PLACE
FLUSHING, NY
Site 1 of 2 in cluster Q

NY LTANKS **S103273254**
NY Spills **N/A**

Relative:
Higher

LTANKS:

Actual:
24 ft.

Site ID: 86401
Spill Number/Closed Date: 0405679 / 8/26/2004
Spill Date: 8/9/2004
Spill Cause: Tank Failure
Spill Source: Private Dwelling
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: JMROMMEL
Referred To: Not reported
Reported to Dept: 8/24/2004
CID: 408
Water Affected: Not reported
Spill Notifier: Affected Persons
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 8/24/2004
Spill Record Last Update: 8/26/2004
Spiller Name: CHRISTOPHER SEIB
Spiller Company: PROSPED FLUSHING PROMANON
Spiller Address: 39-08 JANET PLACE
Spiller City,St,Zip: FLUSHING, NY
Spiller County: 001
Spiller Contact: CHRISTOPHER SEIB
Spiller Phone: (315) 483-2477
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 79270
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL"8/26/2004 Sangesland spoke to Chris Seib of Whitestone Associates This spill number is a duplicate to an existing Rommel spill number 9712812.Spill Closed - Ref #9712812

Remarks: STILL AN ON-GOING INVESTIGATION. IT HAS NOT BEEN TAKEN CARE OF YET, IT IS A LARGE AREA COVERED. SOIL HAS BEEN CONTAMINATED.

Material:

Site ID: 86401

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

Operable Unit ID: 888420
Operable Unit: 01
Material ID: 486474
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 86401
Operable Unit ID: 888420
Operable Unit: 01
Material ID: 486475
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 86401
Operable Unit ID: 888420
Operable Unit: 01
Material ID: 486476
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 86401
Operable Unit ID: 888420
Operable Unit: 01
Material ID: 486477
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

SPILLS:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

Facility ID: 9800087
Facility Type: ER
DER Facility ID: 218569
Site ID: 268318
DEC Region: 2
Spill Date: 4/2/1998
Spill Number/Closed Date: 9800087 / 2/6/2004
Spill Cause: Deliberate
Spill Class: Known release that creates potential for fire or hazard. (Highly Improbable)
SWIS: 4101
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 4/2/1998
CID: 366
Water Affected: FLUSHING BAY
Spill Source: Unknown
Spill Notifier: Local Agency
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 4/2/1998
Spill Record Last Update: 3/14/2007
Spiller Name: Not reported
Spiller Company: OWNER OF BELOW PREMISE
Spiller Address: 39-08 JANET PL
Spiller City,St,Zip: FLUSHING, NY 11354-001
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE"DEC CONTRACTOR CLEAN SURFACE LAND SPILL. SOME IMPACT TO SURFACE WATER THAT WAS UNRECOVERABLE. SEVERAL ABANDONED DRUMS HANDLED BY USEPA. CASE REFERED TO USCG UNDER OPA 90. 03/14/07-Vought-Received copy of final ISR from DEC Tibbe and forwarded ISR to DEC Dennis Ferrar so that Final ISR data could be entered into UIS system. Vought spoke to DEC Carpenter who stated that original Final ISR was required. As per DEC Tibbe final ISR was sent in 6/04 when it was written and only copy is available.
Remarks: CALLER REPORTING A RELEASE OF PRODUCT. IT HAS AFFECTED LAND, SEWERAND THE BAY. CREW ENROUTE TO SITE.
Material:
Site ID: 268318
Operable Unit ID: 1057504
Operable Unit: 01
Material ID: 325641
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 2000
Units: Gallons
Recovered: No
Resource Affected: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

Oxygenate: False

Tank Test:

Facility ID: 9712812
Facility Type: ER
DER Facility ID: 399378
Site ID: 86402
DEC Region: 2
Spill Date: 2/17/1998
Spill Number/Closed Date: 9712812 / 10/7/2011
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Unable/unwilling Responsible Party. Corrective action taken. (ISR)

SWIS: 4101
Investigator: rvketani
Referred To: Not reported
Reported to Dept: 2/17/1998
CID: 999
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2/17/1998
Spill Record Last Update: 5/4/2012
Spiller Name: Not reported
Spiller Company: JFLUSHING TRUCK REPAIR CTR
Spiller Address: 39-08 JANET PLACE
Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL"2/18/98 smart.:CONTRACTOR ADVISED OWNER TO COVER SOIL PILE. OWNER WANTED THEM TO SIGN AFFADAVIT BUTR CONTRACTOR REFUSED. OWNER SAID THAT THEY WOULD GET OTHER ESTIMATES BUT CONTRACTOR BELIEVES THAT THEY WILL GET RID OF SOIL THEMSELVES AND NOT RE-REGISTER. TIBBE MAY HAVE HANDLED INITIAL RESPONSE.4/12/04-Vought-Spill transferred from Mulqueen to Rommel as per Rommel.8/26/2004 Sangesland spoke to Christopher Seib of Whitestone Associates (908-668-7777) His firm is going to do the environmental investigation & remediation on this site. A new spill number was called in, but it was closed out and referenced back to 9712812.Ref # 0405679 - now closed3/9/2007-Ian Beilby: A tank closure report was received. A quick review was performed to determine if spill could be closed. It was not clear that any work plan had been developed and approved or that there was any department involvement during the fieldwork. The report was forwarded to Region 2 with requested reassignment.Spill previously assigned to Ian Beilby in CO.3/12/07 - Austin - Recieved closure report from Beilby. Spill reassigned to Raphael Ketani for review - below referenced PIN spill report closed -

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

end*****NOTE
THIS SITE WAS ALSO A PIN JOB - REF #9800087- MARK
TIBBE*****3/12/
07 - Raphael Ketani. I spoke to Sue of the Albany Attorney General's
Office (518) 474-8105. She said that the PIN case was never referred
to her office. I spoke to Mr. Tibbe of DEC Region 2, DER Unit B,
regarding this PIN case. He said that the site was a 10 acre
property. He said that spill #9712812 and spill #9800087 are not
related to each other. Spill #9800087/PIN 00537 involved oil that was
running from a fuel tank that was cut open and left to spill oil into
a street storm sewer. The oil ran from the sewer, down the sewer
pipe, out into Flushing Creek, and then out to open water beyond the
Coast Guard's buoys. DEC started a PIN and cleaned up the spilled oil
on the street, in the sewer, and the drain pipe. Then DEC billed the
Coast Guard through "Open 90." According to Mr. Tibbe, the Coast
Guard agreed to pay for the cleanup. The owners of the site are ABS
Flushing Development, LLC, 1274 49 Street, Ste 302, Brooklyn, NY,
11219. The consulting company is Whitestone Associates, Inc., 35
Technology Drive, Warren, NJ, 07059. The contacts are Ronald F.
Meloskie (908) 668-7777 (case manager) and Keith D'Ambrosio, PE. The
site is located at 39-08 Janet Place, Flushing. The block and lot are
04963/0007. There is a PBS case #2-031739 under the previous owners,
Flushing Promenade, LLC. Tanks #2 and #3 are listed as temporarily
out of service and tanks #1, and #4 to #6 are listed as
closed/removed. Tank #1 was removed 2/1/98 and the other 3 were
removed 8/1/03. 3/13/07 - Raphael Ketani. I have reviewed the 1/11/07
Underground Storage Tank Closure/Remedial Investigation/Remedial
Action Report and Corrective Action Workplan produced by Whitestone
Associates, Inc. (Whitestone). The site has an "E" designation. From
the Executive Summary: Site investigations were performed from 1990 to
1995 and found contaminated soil and groundwater. A phase I and
limited phase II investigation were completed in 12/01 and 2/02,
respectively, by Merritt Environmental Consultants, P.C. (MEC). The
previously listed USTs were the two 550 gal. gas tanks and a 4,000
gal. diesel tank. There were abandoned drums on the property which
were overpacked and removed in 1998. QR Development Corporation, a
former owner, hired a contractor in 1998 to install a sump or
drywell. However, a UST was discovered in the northeast corner of the
site. It was removed, but the contents spilled into a storm drain and
entered Flushing Creek (spill case #9800087). MEC completed a
subsurface investigation in 2002. VOCs, SVOCs and metals exceeded the
Recommended Soil Cleanup Objective standards. Whitestone did some
followup investigative work in 2002 consisting of a GPR survey for
the entire site and 10 test pits for the eastern upland area. Three
suspected 20,000 gal. tanks were discovered in a vault via the use of
the GPR. The GPR didn't detect any anomalies in the western part of
the site. UST closure and remediation activities were conducted by
Whitestone from 8/04 to 5/05. These activities included the removal
of 16 USTs and ASTs (however, the 1/17/07 report lists only 11 tanks
and many of these don't appear in the PBS database), removal of
contaminated soil from around the tank locations, removal of
contaminated groundwater, soil end-point sampling, installing 10
borings with Geoprobos for groundwater sampling, and digging 9 more
test pits for soil and groundwater collection. The post excavation
sampling involved 24 soil samples, of which 7 had SVOC exceedences.
Post excavation sample PE-5 had exceedences for xylene. So additional
soil was removed. Soil samples XE-1 to XE-3 showed that there were no

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

exceedences. The remedial investigation resulted in finding that 7 of the 10 groundwater samples from the Geoprobos (#1 to #6 and #10) and Test Pit #5 exceeded the groundwater standards. Free product was found at sites #4 to #6 and #10. Subsequent remediation was performed by Whitestone in 2006 and included 6 additional test pits to characterize soil and groundwater in the western part of the site. Test pits #1, #2, #4, and #6 had soil exceedences. Test pits #2 to #4 had groundwater exceedences. From the body of the report: I looked at the Soil and Groundwater Sample and Proposed Monitor Well Location Plan. It shows only 10 tank locations, even though the enclosed PBS registration form shows 11 tanks. The Proposed Vapor Barrier and Cap Details plan shows the vapor barrier resting on top of a gravel subbase. It is not clear what size gravel this will be and whether it is safe for the liner. It is not clear from any of the 3 diagrams whether type 1 sub-base fill material will be used. There is a 9/24/04 letter from Brookside Environmental, Inc. stating that a total of 16 USTs and ASTs were removed (again, this is not reflected in the PBS records on file nor the PBS application in the report). The discrepancy regarding the 6 undepicted 275 gallon ASTs is that they were all in 1 story buildings that were along the north side of the property. This has been determined from a sketch that accompanies the Brookside letter. There were few test pits and borings in the vicinity of these tanks. Additional pits and borings may be necessary. The boring and test pit logs didn't reveal anything more than some concrete, construction debris and fill material. As many other nearby sites in the area along Flushing Creek have large amounts of old tires, metal, bricks, glass, plastic and other debris resting on top of the intertidal surface, it is not clear why these materials haven't been reported. The soil analyticals for each soil boring and test pit sample vary in the number of VOC and SVOC hits. Some sites have no detects at all for either VOCs and SVOCs. If there are exceedences of the TAGM RSCOs, usually they are very low. Groundwater samples from the borings and test pits typically have several VOC hits and many SVOC hits. Many groundwater samples have several VOC exceedences and several SVOC exceedences. However, all of the exceedences are usually at very low levels in the parts per billions and just over the groundwater standards. The water in Flushing Creek has a history of being contaminated and may be contributing to the presence of the analytes, aside from the area being heavily industrial and commercial. So there doesn't appear to be any serious contamination issues at the sites where soil and groundwater samples have been taken. In summation, the report is INCOMPLETE and needs the following: 1) a plan for additional soil borings and test pits with soil and groundwater sampling in the western part of the site 2) analysis of all samples via methods 8260 and 82702) narrative descriptions in the text regarding what will actually be built with fold out plans depicting the footprints for the apartment building, stores, and promenade for the site 3) fold out elevation plans depicting the various structures and buildings to be constructed on the site WITH DEPICTION OF THE VAPOR BARRIER OR VENTING SYSTEMS 4) narrative descriptions of the the various vapor barrier or venting systems with a detailed fold out plan depicting them 5) pictures showing all aspects of the site 6) all 16 tanks must be registered on the DEC PBS system, or else the case can not be closed After reviewing the report, I talked to Maurice Winter (718) 595-4514 of the NYC DEP, Division of Environmental Planning and Assessment, 59-17 Junction Blvd., 11th Floor, Flushing, 11373. He

KOREAN MARKET (Continued)

S103273254

said the site has a Hazmat "E" and Noise designation. He said he is also reviewing the project and that the site will have an apartment building with underground parking. Groundwater is about 3 to 4 feet below grade in the western part of the site. I told him that, with the exception of one sentence in the first paragraph of the Executive Summary, there is no mention of the apartment building. There is just a plan for a promenade and park. He said he thinks they have to do a lot more borings and test pits in the western part of the property. I told him that I agreed and that the report was very incomplete because of this. Mr. Winter said that he sent a letter on 3/6/07 asking for more borings. 3/15/07 - Raphael Ketani. I met with Randall Austin, Chief Engineer Spill Prevention and Response Unit, Region 2, to discuss the case. I told him that there is soil and groundwater contamination, but it is not significant for such an industrial area and as per TAGM standards. I showed him the boring, well and test pit plan and explained that this was a big project. He agreed with me that the project was too big for the Spills Unit, but advised me to call the consultants. I spoke to Ronald Meloskie of Whitestone (908) 668-7777. I told him about the deficiencies of the report. I also asked him whether the owners had ever considered applying for the brownfield program. He said that his company had talked to the previous owners about the program about 5 or 6 years ago, but they weren't interested as time was a concern. I asked him about whether the current owners would be interested. Mr. Meloskie sounded very non-committal and uninterested about the program and seemed to indicate that the present owners would also not be interested. I told him where the web site was located if he wanted to get more information. 3/16/07 - Raphael Ketani. I spoke to Mr. Winter at DEP. I told him that DEC Spill Prevention finished its review and had comments. I gave him the list of 6 comments as above. I also told him that this case was too big for Spills and will probably be transferred to DER Unit B. He said he understood. 3/28/07 - Raphael Ketani. A letter was sent to Mr. Meloskie with 6 items that needed to be addressed in order to complete the information that DEC requires for the site. This items included: 1) additional soil borings, wells, and test pits for the western part of the site 2) analysis of samples via 8260 and 82703) surveying of water table elevation at all locations and construction of contaminant plumes 4) descriptions of what will be constructed with fold out plans showing footprints, elevations, and detail of vapor barrier for each structure 5) photos of current site conditions 6) revised PBS registration for the 16 tanks 6/18/07 - Raphael Ketani. Yoram Barel of LEV Group (a developer working with the owners ABS Management) (917) 514-2114 called to get clarification as regards what DEC was requesting in it's 3/28/07 letter. I explained everything in detail for clarity for Mr. Barel. He said his company is having a meeting with ABS and Whitestone tomorrow and will explain what DEC is asking for. 10/24/07 - Raphael Ketani. I contacted Mr. Barel. He said that the phase II investigation plan had been submitted to the DEP and had been approved a month ago. I asked him to send me a copy of the plan. He said he will. I asked him whether any digging had taken place to remove material at the site. He said "No." 10/29/07 - Raphael Ketani. Today I received the 7/10/07 Health and Safety Plan, and the 7/20/07 Phase II Environmental Site Assessment Workplan from Whitestone Associates, and the 8/23/2007 HASP and Phase II Workplan review letter from the NYCDEP. I began my review of the Phase II Workplan today. 10/31/07 - Raphael Ketani. I finished my review of the Workplan. The deficiencies were as

KOREAN MARKET (Continued)

S103273254

follows:1) a location was found where there were spent solvents, and ignitable and corrosive waste, but no mention is made of where this site is2) at least one soil boring is necessary at the former location of the solvents and other waste3) only 6 tanks are listed under PBS registration #2-031739. However, 16 tanks were removed. Also, 2 of the tanks in the PBS registration are listed as temporarily out of service, which is wrong.4) the planned borings for the western half of the site are too few in number and so are too widely spaced to characterize this part of the site - up to 165' apart between SB-6 and SB-9, with 110' being typical. Nine more borings should be proposed which would be situated between the borings that are already depicted.I wrote a DRAFT letter with these comments to Mr. Meloskie, with a "c-c" to Mr. Winter and Mr. Estesen of DEP, and submitted it to Randall Austin, Chief of the Spills Unit, for his review. He approved the letter and it was sent out today.11/13/07 - Raphael Ketani. I spoke to Mr. Meloskie (908) 668-7777 regarding the additional borings that DEC was requesting. We discussed that nine more borings are required by DEC. Mr. Meloskie stated that he will send a revised boring plan with a cover letter and will include the location of the former hazardous material site. He also stated that he is working with the present owner to put together a revised PBS application for the 16 tanks. I told him that the owner needs to sign the forms, submit a copy of the deed of ownership, and a check for the appropriate amount. He said this will be done. 11/16/2007 - Raphael Ketani. I received the revised boring plan from Mr. Meloskie of Whitestone Associates, Inc. I reviewed the revised Proposed Soil Boring Location Plan map and found it to be acceptable. I reviewed the entire revised boring plan and found the responses to be acceptable.I contacted Mr. Meloskie and told him that both parts (7/20/07 Work Plan and the revised work plan dated 11/15/07) of the proposed boring and sampling plan were acceptable and to have his company start the investigation as soon as possible. He said that the work is scheduled to start about 11/26/07. I informed Mr. Winter of DEP that the work will start next week. 12/11/07 - Raphael Ketani. I met Yoram Barel (646) 443-3717 at the office. He was here to see someone in another division. He told me that all of the borings have been done and the soil samples were sent to the lab. He said that the analyticals should be received soon.1/11/08 - Raphael Ketani. Today I received the revised PBS registration form for 17 tanks of various sizes for the site. The PBS case is #2-031739. I forwarded the form to Nick Lombardo of the PBS Unit. 1/31/08 - Raphael Ketani. I checked the PBS registration. It still hasn't been updated. I contacted Mr. Meloskie (908) 668-7777 of Whitestone. He said that the report is still in draft form, but he can send the analytical tables. I told him that would be fine.I received the site plan and analytical tables. 2/6/08 - Raphael Ketani. I reviewed the soil and groundwater analytical data. The results were largely non-detect. The only exceptions were soil sample SB-5S, which had 4 hits that were on the border with the TAGM exceedences, and groundwater samples SB-5GW, SB-6GW, and SB-9GW. SB-6GW and SB-9GW had 35 ppb and 57 ppb of MTBE, respectively. SB-5GW had 5 exceedences of the TAGM groundwater standard, but only 1,3,5-trimethylbenzene at 26 ppb and ethylbenzene at 54 ppb were somewhat above the limits.3/7/08 - Raphael Ketani. Today I received the Phase II Environmental Site Assessment Report, Remediation Plan, and Site Specific Construction Health and Safety Plan for Remediation and Earthwork. All of the plans were submitted by Whitestone

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

Associates, Inc. and dated 3/5/08. I began my review of the documents. 3/10/08 - Raphael Ketani. I looked over the Health and Safety Plan. I reviewed the Phase II ESAR. For soil samples SB-6D to SB-10D and SB-11 to SB-19, the great majority of the results were non-detect. There were a small number of hits and a small number of low level exceedences for combustion product analytes. As with my 2/6/08 review of the groundwater results, there were a small number of analyte hits and a very small number of low level TAGM exceedences. 3/13/08 - Raphael Ketani. I finished my review of the Phase II ESAR, the Remediation Plan, and the Health and Safety Plan. I sent a letter to Mr. Meloskie of Whitestone (908) 668-7777 approving the Phase II ESAR and Section 4.0 of the Remediation Plan. I checked the PBS case #2-031739. It still shows tanks #1 and #2 temporarily out of service and tanks #3 to #6 closed and removed. I checked with Nick Lombardo of the PBS Unit. He said the application was returned because there was no federal tax i.d., nor a copy of the deed of ownership. He said that happened back a couple of months ago. 5/5/08 - Raphael Ketani. I received an e-mail today from Mr. Meloskie. He stated that they will be starting the remediation work at 3908 Janet Place. They will start the utility mark outs today. The remediation will include installation of the product recovery trenches and excavation of the soil "hot spot." 5/8/08 - Raphael Ketani. Mr. Meloskie called me today. He said that the job has been delayed about a week. He said that they would like to fill in any excavations with broken concrete rubble from the buildings that were knocked down. I told him that as long as it is determined that the concrete is free from hazardous materials (i.e. asbestos) and is itself non-hazardous (i.e. doesn't contain heavy metals or contaminants), then using it would be alright. 7/10/08 - Raphael Ketani. Mr. Meloskie (908) 668-7777 called me on 7/8/08 and I returned his call today. They had excavated the hot spot. He will send the post excavation sample report. They installed three product recovery trenches. Two have only a sheen and third had 3 feet of mixed oils product. The trench is in the vicinity of fuel tanks that were along Janet Place. He asked me to write a SPDES Equivalency Permit. He said he spoke to Steve Watts of Environmental Permits and Mr. Watts told him that this type of permit is issued when dewatering is taking place for a remediation project. Mr. Watts told him that Spills should do the permit. I spoke to Randall Austin, Chief Region 2 Spills Unit, about the SPDES permit. He said that if the discharge is to a storm sewer or a water body, then a SPDES permit is necessary as a Stipulation Agreement. If the discharge is to a combined or sanitary sewer, then the DEP issues the permit. He said we also need to know the rate of discharge and how the water will be processed before discharge. 8/19/08 - Raphael Ketani. I tried to contact Mr. Melowski, but could only leave a voice mail. 8/21/08 - Raphael Ketani. Mr. Melowski (908) 668-7777 called me back. He said that nothing is happening at the site right now. The SPDES permit is on hold. The draft report for the hot-spot remediation has been completed and is under review by the client. Sebastian Zacharias, Environmental Engineer from the Region 2 Water Division, came over to discuss the SPDES permit and the Remediation Plan. He said that they didn't need a SPDES permit during the remediation phase of work if the area that is disturbed to set up the system is small. He added that during construction they will need a SPDES permit. Mr. Zacharias stated, however, that they did need a SEEP - a plan for soil disturbance and dewatering system construction. I called up Mr. Melowski and told him

KOREAN MARKET (Continued)

S103273254

that Mr. Zacharias said that a SEEP was needed, but not a SPDES. Mr. Melowski told me he will contact Mr. Zacharias. I asked Mr. Melowski to send Spills copies of any documents that are submitted to the Division of Water. 8/26/08 - Raphael Ketani. Imdadul Islam of the Division of Water, Region 2 sent Mr. Meloskie guidance regarding whether the developers need a SPDES permit, and also stating that the demolition of the buildings without the permit was a violation of the regulations. 9/15/08 - Raphael Ketani. I checked the PBS record (#2-031739). It shows tank #2 and #3 temporarily out of service, but all of the other tanks are listed as closed and removed. I tried to contact Mr. Meloskie (908) 668-7777 to find out if any work is taking place at the site, but could only leave a voice mail. 9/18/08 - Raphael Ketani. Today I received the "Hot Spot" Soil Remediation Status Update report dated 9/17/08 from Mr. Meloskie. The report dealt with the "hot spot" remediation and initial free product recovery. 9/19/08 - Raphael Ketani. I reviewed the "Hot Spot" report. It stated that 2,300.59 tons of contaminated soil were removed from the 3 "hot spots", and 3 free product collection trenches were installed in the eastern half of the site where many fuel tanks had been present. The end-point sample results for the test pits were all below TAGM RSCO limits. I spoke to Mr. Meloskie about the oil under the eastern half of the site. I told him that back on 7/10/08 we had a conversation about the newly dug trenches and he commented that there was a 3 foot thick layer of mixed oil in one trench. I commented that there must be a lot of oil contaminated soil in the capillary fringe zone above the water table. I added that this probably requires soil treatment after the oil is recovered from the water table. He said that this is one possible way to treat the oil contamination and that Whitestone is looking at various options. Mr. Meloskie said that the trenches are 30 feet long and 5 feet into the water table. There are 6" diameter collection pipes at the ends of each trench. I sent a letter to Chiam Hoffman of ABS Flushing Development, LLC (owners), Yoram Barel of Lev Real Estate (1230 Avenue of the Americas, 7th Floor, NY, 10020), Mr. Meloskie, and Mr. Estes of DEP, requesting a plan to address the oil contaminated soil below the site. 10/27/08 - Raphael Ketani. I tried to reach Mr. Meloskie (908) 668-7777, but could only leave a message regarding progress at the site. 10/28/08 - Raphael Ketani. I received the following e-mail today from Mr. Meloskie: Raphael and Terrell, Currently, Whitestone Associates is not providing remediation and consulting services on behalf of ABS Management or LEV Group for the above referenced project. LEV Group is providing the petroleum remediation as an "in-house" service not under our oversight. Any questions regarding the remediation or site development status should be directed to Yoram Barel at LEV (917-514-2114) or Alexander Ashkanazi at ABS (718)974-9783. Please also feel free to call me at 908-668-7777 and I will provide you with any information that I have. Thanks, Ron Meloskiel tried to contact Mr. Barel and Mr. Ashkanazi regarding the submission of a soil remediation plan, but could only leave messages. 11/5/08 - Raphael Ketani. Mr. Barel sent me an e-mail today: This email is a response to your message from last week regarding the future remediation work at 131-35 Roosevelt Avenue. The recovery of the free product will continue directly by the ownership and with Whitestone Associates' coordination, free product will be pumped into drums and will be disposed accordingly. We will notify Whitestone and the DEC of the recovery progress. Sincerely, Yoram Barel LEV Group 1230 Avenue of the Americas 7th

MAP FINDINGS

KOREAN MARKET (Continued)

S103273254

FloorNew York, NY 10020Also, I received a letter dated 11/4/08 with an attached Notice of Violation and Order on Consent from Robert Elburn, Regional Water Engineer. The letter was sent to the Lev Group, LLC and stated that the violation was due to the failure to comply with the SPDES General Permit and implement a Stormwater Pollution Prevention Plan. The plan was needed because the site is directly upslope from Flushing Creek. The owners of the site had work performed not only without a SPDES permit, but also without taking precautions to prevent water and sediment runoff from entering the creek during building demolition and digging. A penalty of \$5,000 was issued and they have 15 days to send a check with the signed Order.12/2/08 - Raphael Ketani. I contacted Mr. Barel (917) 514-2114. He said that he came back from the site today and there is still free product in a trench to the south. They collected some product and are waiting for more to accumulate.12/22/08 - Raphael Ketani. I spoke to Mr. Barel. He said that they are still collecting oil from the trench to the south. He said that their technique is to collect product, wait for the oil layer to build up again, and then collect some more oil. It is a slow method, but, this way, they collect almost only product and minimize their disposal costs. I asked him to send DEC the oil collection totals as he gets them. Mr. Barel said that he will. 2/11/09 - Raphael Ketani. I tried to contact Mr. Barel in order to find out what progress had been made regarding collecting the oil in the trench, but could only leave a message. 2/23/09 - Raphael Ketani. I spoke to Mr. Barel (917) 514-2114. He said that no work has been taking place as the DOB had issued a stop work order. I asked him why. He said that the rain from several weeks ago had run to the site and ponded on the western part of the property. When the DOB noticed this, they issued the stop work order. The site has no sewers and so the water can not drain. Mr. Barel stated that it would be expensive to remove all of the water and that the owners don't want to spend the money. He added that economic conditions are bad. I told him that the economic conditions are not the DEC's concern and that the remediation work must proceed. I asked him whether the water has overflowed the trenches and whether the oil is flowing onto the site. He said it was not. I told him to contact the owners and tell them that the DEC wants them to proceed with the cleanup. He said that he will tell them and that he will try to get the DOB to lift its stop work order. 3/12/09 - Raphael Ketani. I spoke to Mr. Barel. He said that no work has taken place since we last talked. He said that the stop work order still stands. The owners, ABS Flushing Development, LLC, refinanced their project about a week and a half ago. However, they are making no efforts to get the stop work order lifted. I told him to press them to resolve this matter. He said that a letter from DEC would help. I asked what the address is for mail to the owners. He said that it is: ABS Flushing Development, LLC, 1531 57th Street, Brooklyn, 11219 (the previous address was ABS Flushing Development, LLC, 1274 49 Street, Ste 302, Brooklyn, NY, 11219). 4/21/09 - Raphael Ketani. I tried to contact Mr. Barel (917) 514-2114 regarding remediation progress at the site, but could only leave a message.5/29/09 - Raphael Ketani. I tried to contact Mr. Barel (917) 514-2114 regarding remediation progress at the site, but could only leave a message.6/1/09 - Raphael Ketani. I tried to contact Mr. Barel, but could only leave a message. I checked the PBS registration (#2-031739). It still shows two tanks as temporarily out of service. As there has been no contact from Mr. Barel or the owners, ABS Flushing Development, LLC, I drafted a STIP agreement and submitted

MAP FINDINGS

KOREAN MARKET (Continued)

S103273254

it to Randall Austin, Chief of the Spills Unit for his approval.6/2/08 - Raphael Ketani. Mr. Austin discussed the case with me and suggested having the owners of the site come in for a meeting with DEC, instead of sending the STIP. We would discuss the status of the site, the presence of the oil on the water table, and the failure of the owners to register the 17 tanks.I contacted Alexander Ashkanazi, one of the owners, at (718) 974-9783. I told him that we would like a meeting with him at DEC to discuss the site. He told me that I should contact Chaim Hoffman, the owners representative, at (347) 683-6047. I spoke to Mr. Hoffman and he said that he will call me back this afternoon to arrange a meeting with DEC. In the afternoon, I received a call from Cody Jones of the LEV Group (646) 443-3701. He said that he represented the owners. I told him that I had been trying to get ahold of Mr. Barel and I asked him where he was. He said that Mr. Barel was out of the country. I asked Mr. Jones whether he had the authority to represent the owner in Mr. Barel's absence and whether he can arrange a meeting between the LEV Group and DEC. He said that he can represent the owner in any matter and that he can get the necessary people together for a meeting. I told him that DEC wanted to have a meeting here at our office regarding the lack of progress concerning collecting the oil on the water table, the status of the site, and the failure to register the 17 tanks that were on site. Mr. Jones said that the tanks were registered. I told him that they were not. He said that he will talk to his people and see when they will be available to meet with the DEC. I suggested June 18 at 10:30AM.A little while later, Mr. Jones called back and said that June 18 at 10:30AM would be fine. He said that he was FAXing over the completed PBS registration form with the formerly missing federal tax i.d. and a copy of the deed of the ownership.I received the FAX containing the PBS registration forms. The deed of ownership and the federal tax i.d. number were present. However, a registration form with the original owner's signature was missing. I left a message for Mr. Jones that he needed to send DEC the PBS registration form with the original signature.6/18/09 - Raphael Ketani. I checked the PBS registration #2-031739. All 17 tanks are listed as closed and removed.The meeting took place as scheduled to discuss the case. In attendance were Chaim Hoffman (ABS Flushing Development, LLC - owner), Yoram Barel (LEV Group - developer), Christopher Seib (Whitestone Associates - consultant (908) 668-7777), Randall Austin (Chief of the DEC Regon 2 Spills Unit), John Urda (Senior Attorney Region 2), myself, and Brandon Harrell (DEC legal intern). The issues discussed were the presence of oil in the southern collection trench, the inefficiency of the oil collection method, the lack of permanent groundwater monitoring wells, the possible presence of a source of oil and presence of a plume, the Stop Work Order issued by the NYC DOB, and the groundwater contamination.In summation, the following was agreed upon: ABS will find the source of the oil, submit a plan for installing a number of permanent groundwater monitoring wells, find a better method for collecting the oil, and remove oil contaminated soil. Also, LEV Group will provide the DEC with the contact information for the NYC DOB so that we may try to get the Stop Work Order at least partially lifted.Later today, Mr. Barel sent the following information by e-mail:Department of Buildings site address 131-35 Roosevelt AvenueChief Construction Department block and lot 4963/7Queens Borough Office BIN 4864543 120-55 Queens Blvd. Stop Work Order complaints #4396737, #4383792 Kew Gardens, NY 114246/19/09 - Raphael

MAP FINDINGS

KOREAN MARKET (Continued)

S103273254

Ketani. I found out that the NYC DEP no longer handles "E" designations for sites. They are now handled by Dan Cole (212) 341-0964 of the Mayor's Office of Remediation. I spoke to Mr. Cole and explained the situation to him. I told him that the spill case was a high priority to DEC given the presence of an oil plume, the need to find the source, and the site's proximity to Flushing Creek. Mr. Cole said that he will contact the NYC DOB and try to resolve the matter. If he can't, he added, then he will leave me voice mail instructions regarding what to do to lift the Stop Work Orders.6/23/09 - Raphael Ketani. Mr. Cole "c-c'd" me the following e-mail today and I responded back with the information that he needed, the old and new addresses, and the block and lot for each address:Commissioner Gluckman - attached, I have included a Notice To Proceed that was previously issued by DEP in 2003 for the above referenced site. Although "Notice To Proceed" isn't listed at the top of the letter, the text for the NTP is recommending the applicant may proceed with remediation/construction. I'm informing you about this site since I received a call from a NYSDEC Region II Case Manager (Raphael Ketani) for the petroleum spill assigned to the site. Apparently, the DEC is managing an oil plume that is migrating towards the Flushing Creek and would like the consultant to mobilize quickly to start excavation and removal of impacts soil/fill and has informed me that the permits are being flagged by your office as a result of the E Designation. The DEC required excavation work should be covered under the 2003 Notice To Proceed. If necessary, OER could issue a Notice Of No Objection for the specific excavation permit if required. I will coordinate with DEC and either submit a Notice Of No Objection for the soil excavation or reissue the March 2003 Notice To Proceed with the proper formatting and get back to you as soon as possible.I appreciate your time,Daniel L. Cole, P.G.Bureau Chief, E - Designation ProgramOffice of Environmental RemediationMayor's Office of Operations253 Broadway, 14th FloorNew York, NY 10007Tel. 212-341-0964Fax 212-788-2941dcole@dep.nyc.govwww.nyc.gov/oer I put the March 31, 2003 attached Notice to Proceed letter in the E-docs.06/25/09 - Raphael Ketani. Today I sent out a regular letter and a STIP package to Chaim Hoffman. Both correspondences were previously reviewed and edited by Randall Austin, Chief of the Spills Unit. The letter described all of the work that ABS Flushing Development, LLC agreed to do, as per the 6/18/09 meeting. The STIP had a deadline of July 23, 2009 for being returned signed. Item #1 in the CAP for the STIP indicated that all of the agreed upon work (that was mentioned in the letter dated 6/18/09) should be submitted as an Investigation and Remediation Work Plan.6/30/09 - Raphael Ketani. Mr. Cole sent me an e-mail today stating that he will talk to the NYC DOB and hopefully resolve any issues they have so that the work at the site can resume.7/1/09 - Raphael Ketani. Mr. Cole sent Mr. Seib and I the following e-mail:>>> "Cole, Daniel" 7/1/2009 8:41 AM >>>Raphael - according to DOB, the Stop Work Order is for fence repairs, etc. Obviously this is the responsibility of the property owner and needs to be repaired/lifted before obtaining excavation permits, etc. for your work. For the soil excavation related to the spill, the best way to move forward is have a P.E. or R.A. submit a pre-filing Job Application to DOB with all necessary documentation describing the work so I can reference the Job No. when I issue the Notice of No Objection. Please make sure all required work required for your scope is included. When Whitestone gets everything together, please let me know so I can give DOB a heads-up. Don't hesitate to call if you need

KOREAN MARKET (Continued)

S103273254

any additional info.7/23/09 - Raphael Ketani. The deadline for submitting the signed STIP was today. I did not receive any calls or e-mails indicating that the STIP was on the way.7/24/09 - Raphael Ketani. Mr. Barel called me and asked whether DEC had received the signed STIP. I told him that DEC hadn't. He said that he will contact the owners (though today is friday and so they are in only half a day) and get them to send the STIP in. I also sent an e-mail to Mr. Barel asking him to resolve the Stop Work orders and get the project moving again.7/30/09 - Raphael Ketani. I spoke to Mr. Barel today (917) 514-2114. I asked him why the DEC still hasn't received the STIP with the original signature of the owners. He said that he didn't know why, but he will contact the office of ABS and get them to send it. Then I asked him whether there has been any progress on getting the Stop Work Order lifted. He said that there hasn't. He added that there has been a problem getting insurance for the site, but people are working on the issue. I told him that Mr. Cole is waiting for ABS to submit a pre-filing job application to the DOB. Mr. Barel said that he knows this, but the consultant from Whitestone Associates is on vacation right now. Mr. Barel added that when he consultant comes back, everything will be submitted to the DOB. Mr. Barel asked how Whitestone can submit a work plan when it is not known how many wells will be needed. I told him to talk to the consultant at Whitestone and make a plan with wording that indicates the number of wells will depend upon what additional information they obtain by performing the well installation as they go and doing well gauging and so forth. I told him to make it a general plan. I added that Whitestone will know how it should be worded. Mr. Barel told me that he will get things moving and then the conversation ended.

8/5/09 - Raphael Ketani. Today I received the STIP with the original signature. It was signed by Chaim Hoffman, who supposedly is one of the owners. However, he indicated below his name that he is the manager. 8/6/09 - Raphael Ketani. The signed STIP was sent to Lou Oliva, Regional Attorney, who will review it and forward it to Suzanne Mattei, Regional Director, for her signature.8/18/09 - Raphael Ketani. A fully signed and executed STIP was received from the Region 2 Office of General Counsel. A copy of the signed STIP was sent to Mr. Hoffman with a deadline for submission of the Investigation and Remediation Work Plan of September 18, 2009.

9/24/09 - Raphael Ketani. Mr. Barel (917) 514-2114 called me today. He said that the work plan is almost ready and will go out tomorrow. He said that DEC should have it in hand sometime next week. I asked Mr. Barel whether ABS Flushing Development, LLC is ready to get to work and perform all of the activities that are in the work plan. He said that they are. Mr. Barel added that some oil was collected a month ago, and also at weekly intervals. He said that there was only a small amount of oil. He believes the pool of oil is only a very local phenomena.9/29/09 - Raphael Ketani. I received the Investigation and Remediation Work Plan dated 9/28/09 and prepared and submitted by Whitestone. I reviewed the document, and had no comments.9/30/09 - Raphael Ketani. I passed by the site from a distance (about 400 feet away). I could see what looked like a blanket of light colored material covering the site. It may have been sandy soil. All of the buildings and debris appeared to have been removed.10/2/09 - Raphael Ketani. I spoke to Christopher Seib of Whitestone Associates, Inc. (908) 668-7777. I asked him whether there were any other wells on site. He said that there was just the one upgradient well about 70 feet to the east of the southern product

KOREAN MARKET (Continued)

S103273254

collection trench. I asked him why just 8 wells were planned. He said that Whitestone is willing to put in more, if necessary, once the groundwater flow direction and analyte concentrations are known. He said that it was a money issue. I told him that the plan looked fine and that DEC will send him an approval letter. I asked him whether ABS Flushing Development has resolved all of the Stop Work orders. He said that he wasn't sure, but that he will talk to Mr. Barel and find out. He said that he will let me know by e-mail what the status of the Stop Work orders is. I drafted an approval letter for Mr. Austin. He approved the letter and it was sent to Mr. Seib and to Terrell Estesen of the NYCDEP. 10/29/09 - Raphael Ketani. I tried to contact Mr. Seib (seeb) regarding progress at the site, but could only leave a voice mail. 10/30/09 - Raphael Ketani. Mr. Seib returned my call and left a message. He said that he hoped to finish this phase of the project this Monday, November 2. Mr. Seib's contract was still being finalized with the client for the work that the DEC requires. He added that then the physical work at the site will start very soon afterwards. 11/2/09 - Raphael Ketani. Mr. Cole of the Mayor's Office of Remediation (212) 341-0964 left me a voice message. He stated that the Notice of No Objection letter is about to go out. 11/6/09 - Raphael Ketani. I made an unannounced site visit. There was not much to see. The site was a very large, empty fenced lot (see E-docs). There were white plastic pipes sticking up in the eastern, upland area. There was a large pool of ponded water in the lower, western area. The fence was secure and there were no signs of dumping. 11/20/09 - Raphael Ketani. I tried to contact Mr. Seib (908)668-7777. I could only leave a voice mail stating that the DEC would like to know if progress is being made regarding the further investigation of the oil plume and the collection of the oil. 11/24/09 - Raphael Ketani. Mr. Seib left me a voice mail. He stated that the contract with the driller is still being negotiated. It is expected that the contract will be finalized next week and work will start soon after. 12/22/09 - Raphael Ketani. I tried to contact Mr. Seib, but could only leave a voice mail regarding progress at the site. 12/23/09 - Raphael Ketani. Mr. Seib called me. He said that the contract with the driller has been resolved. However, the Stop Work orders still stand. He said that he talked to Mr. Cole and he said that the orders should be lifted in a couple of days. Mr. Seib said that he hoped to be drilling sometime next week. 1/8/10 - Raphael Ketani. I spoke to Mr. Seib. He said that the issues with the NYC DOB are not resolved. The person at the DOB who is responsible for giving permission to resume work at the site has been on vacation for a couple of weeks. Mr. Seib hopes to have the matter finally resolved by this Monday. He will keep me updated. 2/9/10 - Raphael Ketani. I spoke to Mr. Seib (908)668-7777. He said that he is still waiting for the permits from DOB for doing the investigative work that DEC requested. I tried to contact Mr. Barel (646) 443-3717 regarding what is preventing the LEV Group from obtaining the DOB permits for doing work on the site. However, I could only leave a message. 2/10/10 - Raphael Ketani. I spoke to Mr. Barel. He said that they have had the permit for a week already, but the weather isn't cooperating. He said that he hoped to start drilling in about a week or so, barring bad weather. If the conditions are good, then he will call Mr. Seib and tell him to arrange for the driller and the other contractors. 3/17/10 - Raphael Ketani. I tried to contact Mr. Seib and Mr. Barel, but could only leave messages. 3/18/10 - Raphael Ketani. Mr. Seib returned my call and left a voice mail. He said that the owners and developer

MAP FINDINGS

KOREAN MARKET (Continued)

S103273254

are still having trouble with a permit for the fencing from the NYC DOB.3/19/10 - Raphael Ketani. I tried to contact Mr. Barel, again, but could only leave a voice mail.Mr. Seib called me back today and left a voice mail. He said that he talked to Mr. Barel and he was informed that the work can start. Whitestone will be ready to start the well installation work as soon a driller can be arranged. This will entail starting the work either next week or the week after. Mr. Seib will keep me informed.3/31/10 - Raphael Ketani. I spoke to Mr. Seib. He said that he talked to Mr. Barel. He said that the work will start in a week or two. He will keep me informed. I warned Mr. Seib that if Mr. Barel or the owner are stalling, then the DEC will not look favorably on this tactic. Mr. Seib said that he understood.4/26/10 - Raphael Ketani. I talked to Mr. Seib (908) 668-7777. He said that Whitestone was ready to go on the project as scheduled for the beginning of April, but he never received any word from Mr. Barel that the work could start. He has not been able to contact Mr. Barel since.I tried to contact Mr. Barel (646) 443-3717 regarding why the work didn't start as planned, but could only leave a message.4/28/10 - Raphael Ketani. As there has been no progress regarding the tasks that were described in the approved I&R Work Plan dated 9/28/09, I drafted a letter for Mr. Hoffman stating that ABS was in violation of the STIP and Sections 173 and 176 of Article 12 of the Nav Law. I also stated that they had until 5/14/10 to initiate the tasks, or they will incur penalties and fines.Mr. Austin approved the letter and it went out today. 5/7/10 - Raphael Ketani. Mr. Seib sent me a voice mail that excavation and product recovery will take place starting monday, 5/10/10.5/13/10 - Raphael Ketani. Mr. Seib called me today. He said that his contractor had been digging last teusday. They found lots of concrete in the area that had to be dug up. They also found a utility box with oil in it. This was removed. Also, oil was collected from the site. Today, nothing is happening. They will restart next week.5/24/10 - Raphael Ketani. I contacted Mr. Seib (908) 668-7777. He said that the contaminated soil excavating and the product recovery should be finishing up today. He said that they found a little contaminated soil and it will be characterized for disposal. He said that the amount of recovered oil is really small. He didn't know how much was being recovered from the trenches. Mr. Seib said that once the oil is recovered, it takes a good while until anything measureable comes back. I asked him when the well array will be installed. He said that this part of the project hasn't been set up contracturally. I told him that the DEC doesn't want the well installation to be dragged out too long. I added that the DEC wants to see whether oil or contaminated groundwater is entering Flushing Creek. Mr. Seib said that he understood. With this, the conversation ended. 7/13/10 - Raphael Ketani. I tried to contact Mr. Seib of Whitestone Associates (908) 668-7777, but could only leave a message. 7/15/10 - Raphael Ketani. I spoke to Mr. Seib. He said that Whitestone has been trying to set up a contract with the LEV Group for some time in order to do the well installations and the groundwater monitoring. He said that since there is no contract, he hasn't been out there to check and see how much oil is in the collection trenches. I told him that the DEC was very concerned that the work has come to a halt and that no one is determining whether there is a plume that is affecting Flushing Creek. He said that his hands are tied. I told him that I will send him an e-mail explaining that the DEC is concerned about the lack of progress and that legal action will be taken if the work doesn't start within two weeks (by

KOREAN MARKET (Continued)

S103273254

July 30). He said that he understood. 8/4/10 - Raphael Ketani. Mr. Seib (908) 668-7777 called to say that ABS Flushing Development gave Whitestone a large retainer check. So Whitestone is now scheduling all of the work that needs to take place: monitoring well installation, oil recovery, groundwater monitoring. The work will start sometime in August 2010. Mr. Seib will let me know the exact date. 9/23/10 - Raphael Ketani. I tried to contact Mr. Seib (908) 668-7777, but could only leave a message. 9/24/10 - Raphael Ketani. I spoke to Mr. Seib. He said that the contaminated soil was removed. He added that the well installation will take place during the last week in September 2010. They will wait 48 hours before developing the wells. I told him to wait at least 3 to 4 weeks before sampling the wells so that the fines in the water have settled down. He said that he will. 10/18/10 - Raphael Ketani. Dustin Kapson of Whitestone sent me the following e-mail: In accordance with Whitestone's NYSDEC-approved September 28, 2009 Investigation and Remediation Workplan, eight groundwater monitor wells were installed at the above-referenced site on September 27 and 28, 2010. Development of the wells was conducted on October 8, 2010. A survey was also conducted on October 8, 2010 to establishing casing elevations and groundwater flow direction. No measurable free product was identified at any of the newly installed monitor well locations or product recovery trenches during the installation and development activities. As requested in NYSDEC's October 2, 2009 letter, sampling of the monitor wells will not commence prior to a two-week stabilization period following well development. Upon the completion of two rounds of groundwater sampling and gauging from each of the monitor wells, a report documenting Whitestone's findings (including a discussion of the free product source investigation and removal activities) will be provided to NYSDEC. 11/15/10 - Raphael Ketani. I spoke to Mr. Kapson (908) 668-7777. He said that the well installation and development work took place as planned. However, ABS Management has not paid Whitestone in advance for doing the groundwater sampling. So it hasn't taken place. I spoke to Mr. Barel (646) 443-3717/ cell (917) 514-2114 of the LEV Group regarding why the work didn't start as planned. He said that he thought ABS Management was going to release the money for the well sampling shortly. I told him that the DEC was concerned that the work had stalled again. He said that he will contact the owners and find out when the payments will be made. Then, he will get back to me. 11/16/10 - Raphael Ketani. Mr. Barel called me back. He said that he had spoken to the owner and the problem was that Whitestone wanted to charge them a lot of money to do the rounds of groundwater sampling. So the owners are putting out bids for doing this work to other environmental companies. Mr. Barel added that they hope to have a contractor on board to do the groundwater sampling by this week or next week. I told him that I will wait for a little while and see whether ABS has someone on board and whether they are doing the sampling. 12/3/10 - Raphael Ketani. Rachel Ataman of HydroTech (631) 462-5866 called. She said that HydroTech will be the ones doing the work at the site from this point on. She asked what the project entailed. I told her that the DEC needed to see the groundwater analytical results for the wells that were recently installed in October 2010. I added that the groundwater elevations for each well needed to be surveyed so that a flow map can be constructed. I also told her that if the analytical results indicate that a plume is flowing to Flushing Creek, then more wells will need to be installed. She said that she understood. Mr. Barel (646)

KOREAN MARKET (Continued)

S103273254

443-3717/ cell (917) 514-2114 called me a little while later. He said he had spoken to Ms. Ataman of HydroTech and asked whether just sampling the groundwater was alright for now. I told him that is all that the DEC is looking for at this moment in time. I added that I had told Ms. Ataman that groundwater elevation surveying also needed to take place. Also, I stated that when DEC gets the analytical data for the groundwater samples, then we can determine whether there is a plume and whether more wells are needed to delineate the plume. Mr. Barel said that he was in agreement with doing things this way. I finished the conversation by stating that a final closure report will still be needed for all of the work that has been done and the results of the investigation and remediation. He said that Whitestone will do this report as they have much more knowledge about what went on.1/14/11 - Raphael Ketani. I tried to contact Mr. Barel (646) 443-3717/ cell (917) 514-2114, but I could only leave a message. I tried to contact Ms. Ataman, but found out that she was on maternity leave. I was passed to Mark Robbins in HydroTech. He said that HydroTech did not get the environmental job and so he didn't know anything about the site.1/24/11 - Raphael Ketani. I tried to reach Mr. Barel, but I could only leave a message.Mr. Barel called me back. He said that HydroTech will be at the site tomorrow. They will sample the groundwater and do the well elevation and groundwater surveying. Mr. Barel also said that HydroTech had put together a groundwater sampling plan. I asked him to send it to me.I reviewed the groundwater sampling plan. I had no comments and e-mailed Mr. Barel that they should proceed with the sampling.2/3/11 - Raphael Ketani. Mr. Seib (908) 668-7777 called me today. He said that the first round of groundwater samples had been taken last week. The samples are presently at the lab.2/14/11 - Raphael Ketani. Paul Matli of HydroTech (631) 462-5866 sent me an e-mail with a groundwater report attached dated 2/7/11. I reviewed the report and the VOC and SVOC concentrations were low or non-detect in almost all instances, with the exception of a couple of hits of 100 ppb or above. An oil sheen was seen in three wells, but no free product. Groundwater flow was measured to be heading to the northwest.4/20/11 - Raphael Ketani. Brett Huber of AEI (732) 414-2720, ext 1405 called today. He said that he was putting together a Phase I for the bank that hired his company. He asked about the remediation of the site. I told him what had taken place so far. He asked that he be kept informed if anything should be discovered. He added that he would also like to receive the soil contamination remediation report.I tried to contact Mr. Seib regarding a soil contamination remediation report, but I could only leave a voice message and send him an e-mail.5/2/11 - Raphael Ketani. Mr. Seib sent me an e-mail stating that one more round of groundwater sampling will take place. Then an environmental report will be prepared for the DEC. 6/1/11 - Raphael Ketani. Mr. Huber called to get an update. I told him that the DEC was waiting for the results of the second round of groundwater sampling and the final cleanup report.7/8/11 - Raphael Ketani. I tried to contact Mr. Seib (908) 668-7777 regarding the second round sampling results and the final cleanup report, but I could only leave a message.7/11/11 - Raphael Ketani. I tried to contact Mr. Barel (646) 443-3717/ cell (917) 514-2114 and Ms. Ataman of HydroTech (631) 462-5866 regarding performing the second round of groundwater sampling and sending the final cleanup report. However, I could only leave messages. 7/12/11 - Raphael Ketani. I tried to contact Mr. Barel (646) 443-3717/ cell (917) 514-2114 regarding performing the second round of groundwater

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

sampling and sending the final cleanup report. However, I could only leave messages. 7/22/11 - Raphael Ketani. I tried to reach Ms. Ataman (631) 462-5866/cell (631) 457-0032 regarding when the second round of groundwater sampling will take place. However, I could only leave a message. Ms. Ataman called me back. She said that the second round of groundwater sampling will take place today. 7/25/11 - Raphael Ketani. I received a call today from Mike Taoraima of AEI. He said that he had spoken to Hydro Tech and that AEI will do the sampling. Michael Feinman of Blank Rome, LLC (law firm) called. He said that he represented U.S. Bank, the mortgagee. He wanted to know what was left to close the spill case. I gave him a synopsis of what needed to be done. This was the taking of a second round of groundwater samples, the delivering of the data, and the delivering of a remediation-closer report by Whitestone. Mr. Feinman acknowledged what I had said and the conversation ended. 7/26/11 - Raphael Ketani. Mr. Barel sent me an e-mail that Hydro Tech had performed the second round of groundwater sampling last week. 9/9/11 - Raphael Ketani. I spoke to Ms. Ataman (631) 462-5866/cell (631) 457-0032 regarding the groundwater sampling report. She said that Paul Matli (718) 636-0800/cell (631) 741-7165 is the case manager and that he just sent the report to the DEC. 10/7/11 - Raphael Ketani. I received the second round groundwater monitoring report dated 8/15/11 (the e-mail was in the archive). The samples were taken during July 2011. I reviewed the report. Groundwater was flowing to the north-northwest during July. The elevation of the water table was a little lower than during January 2011. The results for the VOCs and the SVOCs were very low and largely below the CP-51 standards. The results for MW-4 were a little higher than those for the January 2011 sample, but they were still almost entirely below the CP-51 standards. However, the samples for the wells had very consistent results for the SVOCs which slightly exceeded the standards. These results suggest that the groundwater is passing through the historical fill in the subsurface. This is to be expected as the larger area next to and in the vicinity of Flushing Creek was filled in during the early part of the previous century and during the nineteenth century. The information in the case file and the documents in the e-docs indicate that all of the USTs and ASTs, the contaminated soil, the free product and the solid waste had been removed. My previous inspections of the site revealed that the property now consists of just some concrete gravel on an empty lot without any other debris. Also, according to the groundwater reports, there is no oil on the surface of the groundwater and there are only very low concentrations of residual contamination, which is mostly below the CP-51 standards. Given the remedial actions taken by Whitestone Associates and HydroTech, on behalf of ABS Flushing Development, I have determined that the contamination from the original spill has been removed, that the site has been remediated, and that there is no off site contamination. Additionally, the construction plans for the site indicated that a vapor barrier will be installed. Considering all of the above information, I have determined that the site is not a threat to the public or the environment. Therefore, I have closed the spill case effective today. I informed Dan Cole (212) 341-0964 of the Mayor's Office of Environmental Remediation that the DEC was satisfied that the spill had been remediated and that I was closing the case today. Later, Mr. Feinman of Blank Rome, LLC (law firm) called. He asked what else the DEC needed from ABS Flushing Development. I told him that we still needed the closure report from Whitestone summarizing the remediation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOREAN MARKET (Continued)

S103273254

work that took place. Otherwise, the DEC will not issue the NFA letter that ABS Flushing Development needs. He said that the report will be sent.10/24/11 - Raphael Ketani. Mr. Feinman (212) 885-5541 called and left a message. He wanted to know whether I had received the closure report. I returned his call and left a message that the DEC had not received the closure report and so the NFA letter will not be sent out.5/4/12 - Raphael Ketani. Today I received the Remedial Investigation/Remedial Action Report dated 4/23/12 and submitted by Whitestone Associates. I reviewed the Report. The soil analytical data was almost entirely non-detect, with only two elevated hits for 2-methylnaphthalene. These were from SIS-3 and SIS-5 in the oil interceptor trench area. They possibly represented two oily pockets under the site, but they were not of concern as the entire site will be dug out. The report also contained fully signed manifests for oily water and oil. I found the report to be acceptable and sent the NFA letter.

Remarks: tanks being removed. Possible contaminated soil on site. Contractor called about registration information, mentioned he must remove soil, get procedure for removal and registration, said he wasn't hired yet. I didn't write down his name (516#)

Material:

Site ID: 86402
Operable Unit ID: 1059042
Operable Unit: 01
Material ID: 327402
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 86402
Operable Unit ID: 1059042
Operable Unit: 01
Material ID: 327403
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

Q90 **SPECTRUM MAINTENANCE CORP**
NNE **39-08 JANET PLACE**
1/4-1/2 **FLUSHING, NY 11354**
0.413 mi.
2180 ft. **Site 2 of 2 in cluster Q**

CERCLIS **1000547945**
PRP **NYD130153117**

Relative:
Higher

CERCLIS:

Actual:
24 ft.

Site ID: 0204162
EPA ID: NYD130153117
Facility County: QUEENS
Short Name: SPECTRUM MAINTENANCE CORP
Congressional District: 07
IFMS ID: 02JY
SMSA Number: Not reported
USGC Hydro Unit: Not reported
Federal Facility: Not a Federal Facility
DMNSN Number: 0.00000
Site Orphan Flag: Not reported
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: R
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: Not reported
EPA Region: 02
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date: 07/14/00
Site Fips Code: 36081
CC Concurrence Date: / /
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Alias Name(s):

Alias ID: 101
Alias Name: JANET DRUMS
Alias Address: Not reported
NY
Alias ID: 102
Alias Name: SPECTRUM MAINTENANCE CORP
Alias Address: Not reported
NY
Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: REMOVAL ASSESSMENT
Date Started: 04/03/98
Date Completed: 04/03/98
Priority Level: Not reported
Operable Unit: SITEWIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SPECTRUM MAINTENANCE CORP (Continued)

1000547945

Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL
Date Started: 04/03/98
Date Completed: 04/29/98
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Emergency
Action Anomaly: Original Action Take Over

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 04/03/98
Date Completed: 09/16/98
Priority Level: Search Complete, Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 09/16/98
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 04/29/98
Date Completed: 02/09/99
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Time Critical
Action Anomaly: New Action Resulting from Take Over

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SPECTRUM MAINTENANCE CORP (Continued)

1000547945

For detailed financial records, contact EDR for a Site Report.:

[Click this hyperlink](#) while viewing on your computer to access
16 additional US CERCLIS Financial: record(s) in the EDR Site Report.

PRP:

PRP name: QR DEVELOPMENT CORP

**O91
NE
1/4-1/2
0.420 mi.
2218 ft.**

**BLAND HOUSES -NYCHA
40-05 COLLEGE POINT BLVD
QUEENS, NY**

**NY LTANKS S102149024
NY Spills N/A**

Site 2 of 2 in cluster O

**Relative:
Higher**

LTANKS:

**Actual:
30 ft.**

Site ID: 308520
Spill Number/Closed Date: 9106685 / 1/19/2006
Spill Date: 9/20/1991
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: SWKRASZE
Referred To: Not reported
Reported to Dept: 9/20/1991
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 9/30/1991
Spill Record Last Update: 1/19/2006
Spiller Name: Not reported
Spiller Company: NYCHA
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller County: 999
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 139692
DEC Memo: 01/19/06: This spill transferred from J.Kolleeny to S.Kraszewski.
This spill closed to consolidate with open spill #9403446. - SK
Remarks: 20K HORNER EZ-CHECK VISUAL LEAK SYSTEM E, I & R

Material:

Site ID: 308520
Operable Unit ID: 960901
Operable Unit: 01
Material ID: 422374

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

Material Code: 0002A
Material Name: #4 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 308520
Spill Tank Test: 1539075
Tank Number: 001
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

Site ID: 165761
Spill Number/Closed Date: 9414958 / 2/15/1995
Spill Date: 2/11/1995
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 2/15/1995
Cleanup Meets Standard: True
SWIS: 4101
Investigator: HEALY
Referred To: Not reported
Reported to Dept: 2/14/1995
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 2/14/1995
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 2/14/1995
Spill Record Last Update: 1/5/2006
Spiller Name: Not reported
Spiller Company: NYC HOUSING AUTHORITY
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 139692
DEC Memo: Not reported
Remarks: TEMPORARY TANK-FILL LINE FROZE, CAUSED HOSE TO BLOW OFF DUE TO BACK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

PRESSURE. SPILL DISCOVERED BY DEC 3 DAYS AFTER OCCURANCE-NOTIFIED NYCHA.

Material:

Site ID: 165761
Operable Unit ID: 1012387
Operable Unit: 01
Material ID: 373682
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 30
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 270923
Spill Number/Closed Date: 9008753 / 4/25/1995
Spill Date: 11/9/1990
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 4/25/1995
Cleanup Meets Standard: True
SWIS: 4101
Investigator: HEALY
Referred To: Not reported
Reported to Dept: 11/9/1990
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 11/14/1990
Spill Record Last Update: 1/5/2006
Spiller Name: Not reported
Spiller Company: NYCHA
Spiller Address: 250 BROADWAY
Spiller City,St,Zip: NEW YORK, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 139692
DEC Memo: Not reported
Remarks: 20K TANK, SYSTEM TEST, FAILED HORNER EZY CHECK WITH A GROSS LEAK, VISIBLE LEAK AT PETROMETER FLANGE, WILL REPAIR & RETEST. SEE SPILL #

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

9403346

Material:

Site ID: 270923
Operable Unit ID: 945954
Operable Unit: 01
Material ID: 432547
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 270923
Spill Tank Test: 1537861
Tank Number: 002
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

Site ID: 309749
Spill Number/Closed Date: 9403446 / 11/29/2010
Spill Date: 6/10/1994
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: jkkann
Referred To: Not reported
Reported to Dept: 6/10/1994
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 6/10/1994
Spill Record Last Update: 11/29/2010
Spiller Name: Not reported
Spiller Company: NYCHA
Spiller Address: Not reported
Spiller City,St,Zip: ZZ

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 139692
DEC Memo: 01/05/06: This spill transferred from J.Kolleeny to S.Kraszewski. 1995 ISRP indicates little or no contamination present in area around tanks. Both tanks replaced in 1997. No other tank test failures or spills related to tank integrity. No tank closure assessment performed during excavation. Needs a tank closure report. - SK03/22/06: This spill transferred to K.Tang. - SK05/20/09: This spill transferred to J.Kann. Investigative Work Plan submitted on 5/20/09. J.Kann08/18/09: J.Kann - spoke with Jessica of GF on July 10, 2009. Investigative work plan requires 10 existing on-site wells be sampled. Revised work plan submitted July 14. Work Plan approved on August 18.11/29/10: J.Kann - Site Investigation Report submitted on 8/19/10. Based on review of this report - groundwater samples were collected from 10 wells. Two rounds of sampling were performed - May 20 and July 20, 2010. No exceedences were found in nine of the ten wells. 2nd round of sampling should minor exceedences of three SVOCs in groundwater. A qualitative exposure assessment was prepared and a compelte exposure pathway does not exist. Spill closed. NFA.
Remarks: WILL REPAIR AND RETEST AS SOON AS POSSIBLE

Material:

Site ID: 309749
Operable Unit ID: 997236
Operable Unit: 01
Material ID: 383622
Material Code: 0002A
Material Name: #4 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: -1
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 309749
Spill Tank Test: 1542846
Tank Number: 002
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

SPILLS:

Facility ID: 9704751
Facility Type: ER

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

DER Facility ID: 139692
Site ID: 165762
DEC Region: 2
Spill Date: 7/21/1997
Spill Number/Closed Date: 9704751 / 7/23/1997
Spill Cause: Human Error
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: HEALY
Referred To: Not reported
Reported to Dept: 7/21/1997
CID: 365
Water Affected: Not reported
Spill Source: Private Dwelling
Spill Notifier: Local Agency
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 7/21/1997
Spill Record Last Update: 1/5/2006
Spiller Name: FRANK OCELLO
Spiller Company: NYC HOUSING AUTHORITY
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller Company: 001
Contact Name: STEVEN FELDMAN
Contact Phone: (718) 353-7908
DEC Memo: Not reported
Remarks: CONTRACOTRS ARE WORKING ON THE TANKS - CLEAN UP IN PROCESS NOW -
AFFECTING JUST THE BASEMENT OF COMPLEX - NO SEWERS, DRAINS, OR SUMP
PUMP

Material:

Site ID: 165762
Operable Unit ID: 1050626
Operable Unit: 01
Material ID: 334004
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 15
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9111508
Facility Type: ER
DER Facility ID: 139692

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

Site ID: 163878
DEC Region: 2
Spill Date: 2/7/1992
Spill Number/Closed Date: 9111508 / 12/1/1994
Spill Cause: Human Error
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: HEALY
Referred To: Not reported
Reported to Dept: 2/7/1992
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Other
Cleanup Ceased: 12/1/1994
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2/10/1992
Spill Record Last Update: 1/5/2006
Spiller Name: Not reported
Spiller Company: CASTLE OIL
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Not reported
Remarks: FILLED WRONG TANK-SPILLED ON DIRT AT STICKWELL. CASTLE ENROUTE TO CLEAN

Material:

Site ID: 163878
Operable Unit ID: 961635
Operable Unit: 01
Material ID: 416540
Material Code: 0002A
Material Name: #4 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 15
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 163878
Spill Tank Test: 1539600
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

Facility ID: 9411195
Facility Type: ER
DER Facility ID: 139692
Site ID: 165760
DEC Region: 2
Spill Date: 11/21/1994
Spill Number/Closed Date: 9411195 / 11/22/1994
Spill Cause: Human Error
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: HEALY
Referred To: Not reported
Reported to Dept: 11/21/1994
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Responsible Party
Cleanup Ceased: 11/22/1994
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 11/22/1994
Spill Record Last Update: 1/5/2006
Spiller Name: Not reported
Spiller Company: NYC HOUSING AUTHORITY
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Not reported
Remarks: PROJECT APPLIED DRI-SOL TO DRIVEWAY AND SIDEWALK-IN PROCESS OF
PICKING UP AND PUTTING IN 55-GAL DRUMS. CONTRACTOR TO PICK UP.
UPDATE: WINSTON CALLED OUT TO CLEAN OUT CATCH BASIN AND BOILER ROOM
WALL.

Material:
Site ID: 165760
Operable Unit ID: 1005018
Operable Unit: 01
Material ID: 377059
Material Code: 0002A
Material Name: #4 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 50
Units: Gallons
Recovered: 40
Resource Affected: Not reported
Oxygenate: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLAND HOUSES -NYCHA (Continued)

S102149024

Tank Test:

P92
North
1/4-1/2
0.428 mi.
2262 ft.

DNZ AUTO PARTS & AUTO SALES INC.
127-54 WILLETS POINT BLVD.
CORONA, NY 11368

NY SWF/LF **S107784557**
NY HIST AST **N/A**

Site 4 of 5 in cluster P

Relative:
Higher

SWF/LF:

Actual:
10 ft.

Flag: ACTIVE
Region Code: 2
Phone Number: 7185072477
Owner Name: Fahim Abassi
Owner Type: Private
Owner Address: 127-54 Willets Point Blvd.
Owner Addr2: Not reported
Owner City,St,Zip: Corona,, NY 11368
Owner Email: Not reported
Owner Phone: 7185072477
Contact Name: Fahim Abassi
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: 7185072477
Activity Desc: Vehicle Dismantling
Activity Number: [7096858]
Active: Yes
East Coordinate: 597839
North Coordinate: 4512769
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

HIST AST:

PBS Number: 2-605813
SWIS Code: 6301
Operator: JOSE SALGUERO
Facility Phone: (718) 507-6104
Facility Addr2: Not reported
Facility Type: OTHER
Emergency: JOSE SALGUERO
Emergency Tel: (718) 507-6104
Old PBSNO: Not reported
Date Inspected: Not reported
Inspector: Not reported
Result of Inspection: Not reported
Owner Name: DNZ AUTO PARTS & AUTO SALES INC.
Owner Address: 127-54 WILLETS POINT BLVD.
Owner City,St,Zip: CORONA, NY 11368
Federal ID: Not reported
Owner Tel: (718) 507-6104
Owner Type: Corporate/Commercial

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DNZ AUTO PARTS & AUTO SALES INC. (Continued)

S107784557

Owner Subtype: Not reported
Mailing Contact: JOSE SALGUERO
Mailing Name: DNZ AUTO PARTS & AUTO SALES INC.
Mailing Address: 127-54 WILLETS POINT BLVD.
Mailing Address 2: Not reported
Mailing City, St, Zip: CORONA, NY 11368
Mailing Telephone: (718) 507-6104
Owner Mark: First Owner
Facility Status: 4 - Subpart 360-14 only (active)
Certification Flag: False
Certification Date: 11/16/2001
Expiration: 05/01/2006
Renew Flag: False
Renew Date: Not reported
Total Capacity: 550
FAMT: True
Facility Screen: No Missing Data
Owner Screen: Minor Data Missing
Tank Screen: Minor Data Missing
Dead Letter: False
CBS Number: Not reported
Town or City: NEW YORK CITY
County Code: 63
Town or City Code: 01
Region: 2

Tank ID: 002
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Tank Status: In Service
Install Date: Not reported
Capacity (Gal): 275
Product Stored: UNKNOWN
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Tank Containment: Not reported
Leak Detection: Not reported
Overfill Protection: Not reported
Dispenser Method: Not reported
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: Not reported
Test Method: Not reported
Deleted: False
Updated: True
SPDES Number: Not reported
Lat/Long: Not reported

Tank ID: 01
Tank Location: ABOVEGROUND
Tank Status: In Service

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DNZ AUTO PARTS & AUTO SALES INC. (Continued)

S107784557

Install Date: Not reported
Capacity (Gal): 275
Product Stored: USED OIL (FUEL)
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Tank Containment: 8
Leak Detection: Not reported
Overfill Protection: Not reported
Dispenser Method: Not reported
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: Not reported
Test Method: Not reported
Deleted: False
Updated: True
SPDES Number: Not reported
Lat/Long: Not reported

P93
North
1/4-1/2
0.437 mi.
2307 ft.

BOULEVARD AUTO WRECKING INC
127-60 WILLETS POINT BLVD
CORONA, NY 11368

NY SWF/LF S109527689
NY E DESIGNATION N/A

Site 5 of 5 in cluster P

Relative:
Higher

SWF/LF:
Flag: ACTIVE
Region Code: 2
Phone Number: 7185923457
Owner Name: James Davide
Owner Type: Private
Owner Address: 127-60 Willets Point Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7185923457
Contact Name: James Davide
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: 7185923457
Activity Desc: Vehicle Dismantling
Activity Number: [7094125]
Active: Yes
East Coordinate: 597819
North Coordinate: 4512803
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Actual:
10 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BOULEVARD AUTO WRECKING INC (Continued)

S109527689

E DESIGNATION:

Tax Lot(s):	203
E-No:	E-214
Effective Date:	11/13/2008
Satisfaction Date:	Not reported
Ceqr Number:	07DME014Q
Ulurp Number:	080381ZMQ
Zoning Map No:	10a 10b
Description:	Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code:	QN
Community District:	407
Census Tract:	383
Census Block:	1006
School District:	25
City Council District:	21
Fire Company:	L129
Health Area:	43
Police Precinct:	110
Zone District 1:	M3-1
Zone District 2:	Not reported
Commercial Overlay1:	Not reported
Commercial Overlay2:	Not reported
Special Purpose District1:	Not reported
Special Purpose District2:	Not reported
All Components1:	M3-1
All Components2:	Not reported
Split Boundary Indicator:	N
Building Class:	Z9
Land Use Category:	Not reported
Number of Easements:	0
Owner, Type of Code:	Not reported
Owner Name:	BOULEVARD AUTO WRECKI
Lot Area:	000004000
Total Building Floor Area:	0000000800
Commercial Floor Area:	0000000800
Office Floor Area:	0000000000
Retail Floor Area:	0000000000
Garage Floor Area:	0000000000
Storage Floor Area:	0000000000
Factory Floor Area:	0000000000
Other Floor Area:	0000000800
Floor Area,Total Bld Source Code:	7
Number of Buildings:	00001
Number of Floors:	001.00
Residential Units:	00000
Non and Residential Units:	00001
Lot Frontage:	0040.00
Lot Depth:	0100.00
Building Frontage:	0020.00
Building Depth:	0040.00
Proximity Code:	0
Irregular Lot Code:	N
Lot Type:	5
Basement Type Grade:	5
Land Assessed Value:	00000042750
Total Assessed Value:	00000049500
Land Exempt Value:	00000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BOULEVARD AUTO WRECKING INC (Continued)

S109527689

Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.20
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330203
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028392
Y Coordinate: 0216179
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 203
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Exhaust stack location limitations
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: Z9
Land Use Category: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BOULEVARD AUTO WRECKING INC (Continued)

S109527689

Number of Easements: 0
Owner, Type of Code: Not reported
Owner Name: BOULEVARD AUTO WRECKI
Lot Area: 000004000
Total Building Floor Area: 00000000800
Commercial Floor Area: 00000000800
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000800
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0040.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0040.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000042750
Total Assessed Value: 00000049500
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.20
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330203
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028392
Y Coordinate: 0216179
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BOULEVARD AUTO WRECKING INC (Continued)

S109527689

Tax Lot(s): 203
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Hazardous Materials* Phase and Phase II Testing Protocol
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: Z9
Land Use Category: Not reported
Number of Easements: 0
Owner, Type of Code: Not reported
Owner Name: BOULEVARD AUTO WRECKI
Lot Area: 000004000
Total Building Floor Area: 00000000800
Commercial Floor Area: 00000000800
Office Floor Area: 00000000000
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000000000
Factory Floor Area: 00000000000
Other Floor Area: 00000000800
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0040.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0040.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000042750
Total Assessed Value: 00000049500
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BOULEVARD AUTO WRECKING INC (Continued)

S109527689

Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.20
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330203
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028392
Y Coordinate: 0216179
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 203
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: Z9
Land Use Category: Not reported
Number of Easements: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BOULEVARD AUTO WRECKING INC (Continued)

S109527689

Owner, Type of Code: Not reported
Owner Name: BOULEVARD AUTO WRECKI
Lot Area: 00004000
Total Building Floor Area: 0000000800
Commercial Floor Area: 0000000800
Office Floor Area: 0000000000
Retail Floor Area: 0000000000
Garage Floor Area: 0000000000
Storage Floor Area: 0000000000
Factory Floor Area: 0000000000
Other Floor Area: 0000000800
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00001
Number of Floors: 001.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0040.00
Lot Depth: 0100.00
Building Frontage: 0020.00
Building Depth: 0040.00
Proximity Code: 0
Irregular Lot Code: N
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000042750
Total Assessed Value: 00000049500
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1930
Year Built Code: E
Year Altered1: 0000
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.20
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330203
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028392
Y Coordinate: 0216179
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

EDR ID Number
 EPA ID Number

R94
NE
1/4-1/2
0.440 mi.
2322 ft.

MOBIL S/S
133-11 ROOSEVELT AVE.
QUEENS, NY

NY LTANKS **S102142727**
NY Spills **N/A**

Site 1 of 2 in cluster R

Relative:
Higher

LTANKS:

Actual:
33 ft.

Site ID: 154110
 Spill Number/Closed Date: 9103630 / 9/28/2005
 Spill Date: 7/3/1991
 Spill Cause: Tank Failure
 Spill Source: Gasoline Station or other PBS Facility
 Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
 Cleanup Ceased: Not reported
 Cleanup Meets Standard: False
 SWIS: 4101
 Investigator: RJCOZZY
 Referred To: Not reported
 Reported to Dept: 7/3/1991
 CID: Not reported
 Water Affected: Not reported
 Spill Notifier: Affected Persons
 Last Inspection: Not reported
 Recommended Penalty: False
 UST Involvement: True
 Remediation Phase: 0
 Date Entered In Computer: 7/10/1991
 Spill Record Last Update: 9/28/2005
 Spiller Name: MIKE MEOLA
 Spiller Company: EXXONMOBIL CORP
 Spiller Address: 464 DOUGHTY BLVD
 Spiller City,St,Zip: INWOOD, NY 11096
 Spiller County: 001
 Spiller Contact: Not reported
 Spiller Phone: Not reported
 Spiller Extention: Not reported
 DEC Region: 2
 DER Facility ID: 130698
 DEC Memo: 9/28/2005 - Cozyzy - On September 1, 2005, GSC requested closure of this spill. Based on information in the file from Region 2 and a site history submitted by GSC, the following remedial activities took place at this site:5/89-Sixteen 550 gal steel USTs removed and five 4000 gal double walled fiberglass tanks installed. Approx. 390 cubic yds of contaminated soil removed.5/94 thru 6/94 - two 550 gal USTs which had filled with water were removed. Installation of SVE was initiated. 8/94 - two 375 pound vapor phase carbon units installed on SVE.12/94 - needed air 100 permit. Once DAR approves, the SVE will be started.2/95 - SVE was started in February 1995, with three vapor extraction points.3/96 - SVE shut down due to asymptotic recovery rates. Total of 4910 lbs of contaminants removed with SVES.12/99 - SVES dismantled.5/2002 thru 7/2002 - HIT events on MW-5 and MW-13.12/2004 - Sensitive Receptor Survey (SRS) submitted to DEC. SRS was found acceptable in January 2005.The groundwater concentrations have shown a significant decline with all wells on the downgradient side of the property meeting standards. Spill closed.Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL."This spill case was reassigned from DEC (Sigona) to Rommelon 02/10/2004.
 Remarks: PRODUCT COMING OUT OF SOIL. SEWER LINE MAY BE BROKEN.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOBIL S/S (Continued)

S102142727

Material:

Site ID: 154110
Operable Unit ID: 954430
Operable Unit: 01
Material ID: 422764
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: True
Site ID: 154110
Operable Unit ID: 954430
Operable Unit: 01
Material ID: 2106625
Material Code: 1213A
Material Name: MTBE (METHYL-TERT-BUTYL ETHER)
Case No.: 01634044
Material FA: Hazardous Material
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: True

Tank Test:

SPILLS:

Facility ID: 9200118
Facility Type: ER
DER Facility ID: 226736
Site ID: 279236
DEC Region: 2
Spill Date: 4/3/1992
Spill Number/Closed Date: 9200118 / 7/7/2003
Spill Cause: Traffic Accident
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: SIGONA
Referred To: Not reported
Reported to Dept: 4/3/1992
CID: Not reported
Water Affected: Not reported
Spill Source: Gasoline Station or other PBS Facility
Spill Notifier: Affected Persons
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOBIL S/S (Continued)

S102142727

Date Entered In Computer: 4/7/1992
Spill Record Last Update: 7/7/2003
Spiller Name: MIKE MEOLA
Spiller Company: EXXONMOBIL CORP
Spiller Address: 464 DOUGHTY BLVD
Spiller City,St,Zip: INWOOD, NY 11096
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Not reported
Remarks: DRIVE OFF CRACKED HOSE, CONTAINED ON CONCRETE, APPLIED SORBENT & P/U FOR PROPER DISPOSAL.

Material:

Site ID: 279236
Operable Unit ID: 964183
Operable Unit: 01
Material ID: 414945
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 1
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

S95
North
1/4-1/2
0.442 mi.
2336 ft.

CHEAPY STATION INC
127-61 WILLETS POINT BLVD
CORONA, NY 11368

NY SWF/LF **S106003872**
NY Spills **N/A**

Site 1 of 4 in cluster S

Relative:
Higher

SWF/LF:
Flag: ACTIVE
Region Code: 2
Phone Number: 7185338275
Owner Name: Nir Bello
Owner Type: Private
Owner Address: 127-61 Willets Point Blvd.
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7185338275
Contact Name: Nir Bello
Contact Address: 127-61 Willets Pt. Blvd
Contact Addr2: Not reported
Contact City,St,Zip: Corona, NY 11368
Contact Email: Not reported
Contact Phone: 7185338275
Activity Desc: Vehicle Dismantling
Activity Number: [711855]
Active: Yes
East Coordinate: 597820

Actual:
10 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEAPY STATION INC (Continued)

S106003872

North Coordinate: 4512805
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

SPILLS:

Facility ID: 0230007
Facility Type: ER
DER Facility ID: 88940
Site ID: 100127
DEC Region: 2
Spill Date: 5/23/2002
Spill Number/Closed Date: 0230007 / 9/22/2006
Spill Cause: Deliberate
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Unknown Responsible Party. Corrective action taken. (ISR)

SWIS: 4101

Investigator: rvketani
Referred To: Not reported
Reported to Dept: 5/23/2002
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: DEC
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 5/23/2002
Spill Record Last Update: 9/22/2006
Spiller Name: Not reported
Spiller Company: SAME
Spiller Address: Not reported
Spiller City,St,Zip: NN
Spiller Company: 999
Contact Name: JOSE
Contact Phone: (718) 533-8275
DEC Memo: 3/28-05 - Austin - Put under Lombardo's name from Wyne for transfer to Central Office for closure review Transferred back down from Albany - no action by them 9/7/06 - Austin - Assigned from Albany to Region 2 staff (Ketani) for review and closure - end 9/22/06 - Raphael Ketani. There was very little information in the file. I found the following through Property Shark: block/lot: 01831/0035 notice address: B&Z Willets Point Boulevard Corp., 127-20 35 Ave., Flushing, 11368-1514 billing address: B&Z Willets Point Boulevard Corp., 6737 167 Street, Fresh Meadows, 11365-3207 the primary party is Elaine Gelardi, and the secondary is Jacob Bengigil will make a site visit. I found the site. The owner of the shop is Jose Imas, but he wasn't in. The manager showed me the site. The floor was intact with no cracks and made of concrete. There were no oil spills. I could not get to the south and west parts of the shop as there were car bodies placed too close to pass. However, these were empty car bodies from what I

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEAPY STATION INC (Continued)

S106003872

Remarks: could see. Car bodies were placed on racks in the south and west areas and they looked oil free. The engines and transmissions were in shipping containers. There was some oil staining on the floors of the containers, but nothing significant. Other parts were on racks and some Speedi-Dri was being used to soak up a little oil that had dripped out. The place was crowded, but not chaotic. Based upon what I could see, I am closing the spill case administratively.
Junk yard has accumulating oil and other waste automotive fluids accumulating under storage racks. RP had pump in product with discharge line running out into street. Law enforcement on scene.

Material:
Site ID: 100127
Operable Unit ID: 866802
Operable Unit: 01
Material ID: 509645
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

S96
North
1/4-1/2
0.451 mi.
2380 ft.

SEMCO SALVAGE INC. DBA//ROOSEVELT AUTO WRECKING
127-43 WILLETS POINT BLVD.
CORONA, NY 11368
Site 2 of 4 in cluster S

NY SWF/LF S108758412
N/A

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: 7184299059
Owner Name: Eliahu Semo
Owner Type: Private
Owner Address: 127-43 Willets Point Blvd
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: andreaandpaul@aol.com
Owner Phone: 7184299059
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling
Activity Number: [7086235]
Active: No
East Coordinate: 597778
North Coordinate: 4512665
Accuracy Code: Not reported

Actual:
11 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SEMCO SALVAGE INC. DBA//ROOSEVELT AUTO WRECKING (Continued)

S108758412

Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

Flag: ACTIVE
Region Code: 2
Phone Number: 7184299059
Owner Name: Eliahu Semo
Owner Type: Private
Owner Address: 2457 Little Neck Boulevard
Owner Addr2: Not reported
Owner City,St,Zip: Bayside, NY 11360
Owner Email: semoroosevelt@aol.com
Owner Phone: 7184299059
Contact Name: Eliahu Semo
Contact Address: 311 148th Street
Contact Addr2: Not reported
Contact City,St,Zip: Whitestone, NY 11357
Contact Email: Semoroosevelt@aol.com
Contact Phone: 7184299059
Activity Desc: Vehicle Dismantling
Activity Number: [7086235]
Active: Yes
East Coordinate: 597805
North Coordinate: 4512732
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

S97
North
1/4-1/2
0.458 mi.
2416 ft.

NEW BROTHER AUTO BODY SHOP
127-76 WILLETS POINT BLVD
CORONA, NY 11368
Site 3 of 4 in cluster S

NY SWF/LF S108146018
N/A

Relative:
Higher

SWF/LF:
Flag: INACTIVE
Region Code: 2
Phone Number: Not reported
Owner Name: Not reported
Owner Type: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Email: Not reported
Owner Phone: Not reported
Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported
Activity Desc: Vehicle Dismantling

Actual:
11 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEW BROTHER AUTO BODY SHOP (Continued)

S108146018

Activity Number: Not reported
Active: No
East Coordinate: 597831
North Coordinate: 4512835
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**T98
NNW
1/4-1/2
0.461 mi.
2433 ft.**

**ASOCIADO AUTO PARTS INC
126-02 35TH AV
CORONA, NY 11368**

**NY SWF/LF S104789995
NY Spills N/A**

Site 1 of 3 in cluster T

**Relative:
Higher**

SWF/LF:

Flag: ACTIVE
Region Code: 2
Phone Number: 7186793328
Owner Name: Robert Tume
Owner Type: Private
Owner Address: 127-02 35th Avenue
Owner Addr2: Not reported
Owner City,St,Zip: Corona, NY 11368
Owner Email: Not reported
Owner Phone: 7186793328
Contact Name: Robert Tume
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: NY
Contact Email: RTume69@gmail.com
Contact Phone: 7186793328
Activity Desc: Vehicle Dismantling
Activity Number: [7097522]
Active: Yes
East Coordinate: 597668
North Coordinate: 4512746
Accuracy Code: Not reported
Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

**Actual:
14 ft.**

SPILLS:

Facility ID: 0007530
Facility Type: ER
DER Facility ID: 148711
Site ID: 176961
DEC Region: 2
Spill Date: 9/27/2000
Spill Number/Closed Date: 0007530 / 3/9/2006
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASOCIADO AUTO PARTS INC (Continued)

S104789995

SWIS: 4101
Investigator: rvketani
Referred To: Not reported
Reported to Dept: 9/27/2000
CID: 312
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: DEC
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/27/2000
Spill Record Last Update: 3/9/2006
Spiller Name: CALLER
Spiller Company: ASOCIADO AUTO PARTS INC
Spiller Address: 126-02 35TH AV
Spiller City,St,Zip: CORONA NY, NY 11368-1515
Spiller Company: 001
Contact Name: CALLER
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIPPLE"2/4/04 Reassigned Tipple >>> DeMeo12/2/05 - Raphael Ketani. There is no information in the file cabinet regarding this site. G.T.R. Auto Parts is listed at the same address. The spill case for G.T.R. is 2-609263. It's a 250 gal. waste oil tank. Perhaps G.T.R. is the old owner. The "SPDES Storm Water Pollution Prevention Plan and Best Management Practices" dated November 2001 is in the office. Also, the "Summary Report on Subsurface Investigation Program" dated October 20, 2004 is available. I reviewed the "Summary Report". They need to remove the soil at S-2. There is contamination with MTBE above TAGM 4046 for groundwater - 17 ppb to 40 ppb. However, the entire area has groundwater contamination from decades of spillage. I will send a letter to Berninger ordering them to remove the soil at S-2 and do 4 more soil borings: the small automotive container area, the low lying area, midway between S-2 and S-4, and in the old drum area. The NYS DOL's office is involved with this site.1/6/06 - Raphael Ketani. Meeting held between Walter Berninger and Jill Haimson of Berninger Environmental and myself. They agreed to do 4 more borings and to remove soil at S-2.2/13/06 - Raphael Ketani. I received no response so far to my December 5, 2005 letter. Originally, the letter was addressed to Berninger Environmental, but Walter Berninger, President, told me to send the letter to the present owners. The current tenant is a Mr. Tumi. Through Property Shark, I found that the bills are going to Joseph Romano at 24 Noahs Path, Rocky Point, NY, 11778-9144 and the assessment is going to Myrtis Romano at a P.O. Box in Rocky Point. The deed is listed with George Romano. I will send a February 2/13 dated letter to Joseph and George with the same wording as the Dec. 5, 2005 letter.3/2/06 - Raphael Ketani. I received the following e-mail today from Walter Berninger of BEI:Associado I forwarded your letter to the current tenant and the property owner and have heard nothing.3/6/06 - Raphael Ketani. I received a call from George Romano, the owner ((516) 551-4791). He said that he had a previous agreement with the former case manager from Spills, Tim Demeo, for remediating the site. He

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASOCIADO AUTO PARTS INC (Continued)

S104789995

said that Mr. Demeo just had him do several borings. I told him that B-2 had significant contamination and needed to be dug out, and that I had no idea how large a site this was and so I wanted more boring coverage. Mr. Romano said that the site is about 100' x 50'. He asked whether we could come up with a different plan. I told him that the size of the site is small and I can't get ahold of Mr. Demeo. So additional borings may not be necessary. However, I said, I still wanted the soil dug up at B-2 and I wanted to visit the site before agreeing on a solution to this spill case. He said fine and offered a site visit with him on 3/8 at 10AM. I told him I will be there. Below is listed the following e-mail exchange I had with Andrew Gershon, Assistant Attorney General, Environmental Protection Bureau, NYS DOL: Walter Berninger sent me the Summary Report on Subsurface Investigation Program dated 10/20/04. The report was addressed to Tim Demeo. In it are analytical results for VOCs and SVOCs for soil and groundwater. I was not impressed by any of the results, except the VOC results for soil for site S-2. I told George Roman that I was willing to go with just digging up site S-2 down to 4 feet where the worst contamination was found. However, if I see other sites that look really dirt, then I may tell him to dig these up also. We'll see what happens wednesday. I would discuss all of this with Tim, but he is out on leave until the end of March. Do you want a copy of the 10/20/04 report? I'll make a copy and send it via regular mail as a FAX may not come out clear. Rafiel "Andrew Gershon" <Andrew.Gershon@oag.state.ny.us> 03/06/06 1:47 PM >>> I am handling the DEC's civil lawsuit against Asociado. As of December 2004, Berninger environmental had done the approved subsurface investigation. Asociado had not received the results or provided them to DEC because Berninger hadn't been paid. I don't know if that has changed; Tim wasn't great at keeping me up to date. I would ask to see the results, and you can check with Berninger if they were ever provided if the file is unclear. I have no problem with you seeking further testing, but would want to hear your take on the already obtained results before the site is closed out. If you are satisfied that the subsurface needs no further remediation I would resolve the case. 3/8/06 - Raphael Ketani. I made a site visit today and met George Romano. The site is paved over with cement over the entire lot. The cement is free from any cracks. The waste oil tank is now sitting just inside the covered garage in the back. It sits in a large drip pan. There are 3 drums next to it that they put liquids into from the junked cars. The drums looked dry on the outside and I didn't see any wetness at their bases. Site S-2 is situated just under the south end of the suspended office trailer. While the contamination is high, the cement slab is intact with no cracks at all. If the slab were to be opened up, then cement poured to seal the slab would still leave cracks at the edges of the patch for fluids to enter the soil below. For such a small area with only 3 analytes of concern, and because I didn't believe it was worth going after this contaminated soil only to create a bigger problem by breaking the intact concrete slab which would result in having cracks along the edge of any concrete patch, I am closing the spill case. I will send an NFA letter as Mr. Romano had requested.

Remarks: Not reported
Material:
Site ID: 176961
Operable Unit ID: 828315
Operable Unit: 01

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASOCIADO AUTO PARTS INC (Continued)

S104789995

Material ID: 545067
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 176961
Operable Unit ID: 828315
Operable Unit: 01
Material ID: 545068
Material Code: 0043A
Material Name: ANTIFREEZE
Case No.: Not reported
Material FA: Other
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

T99
NNW
1/4-1/2
0.461 mi.
2434 ft.

FLUSHING TOWING
126-28 35TH AVE
CORONA, NY 11368
Site 2 of 3 in cluster T

NY SWF/LF **S108145867**
NY MANIFEST **N/A**

Relative:
Higher

SWF/LF:
Flag: ACTIVE
Region Code: 2
Phone Number: 7185331153
Owner Name: Carlos Canal
Owner Type: Private
Owner Address: 47-07 168 Street
Owner Addr2: Not reported
Owner City,St,Zip: Flushing, NY 11358
Owner Email: flushingtow@yahoo.com
Owner Phone: 7182168872
Contact Name: Carlos Canal
Contact Address: Not reported
Contact Addr2: Not reported
Contact City,St,Zip: Not reported
Contact Email: flushingtow@yahoo.com
Contact Phone: 7185331153
Activity Desc: Vehicle Dismantling
Activity Number: [7099706]
Active: Yes
East Coordinate: 597643
North Coordinate: 4512736
Accuracy Code: Not reported
Regulatory Status: Not reported

Actual:
14 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FLUSHING TOWING (Continued)

S108145867

Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

NY MANIFEST:

EPA ID: NYP010001527
Country: USA

Mailing Info:

Name: NEW YORK CITY DEP
Contact: WAI MAN WONG
Address: 96-05 HORACE HARDING EXP
City/State/Zip: CORONA-A, NY 11368
Country: USA
Phone: 000-000-0000

Manifest:

Document ID: NYB6880815
Manifest Status: Completed copy
Trans1 State ID: PD1010NY
Trans2 State ID: Not reported
Generator Ship Date: 04/19/1995
Trans1 Recv Date: 04/19/1995
Trans2 Recv Date: / /
TSD Site Recv Date: 04/19/1995
Part A Recv Date: 05/08/1995
Part B Recv Date: 05/09/1995
Generator EPA ID: NYP010001527
Trans1 EPA ID: NYD077444263
Trans2 EPA ID: Not reported
TSD ID: NYD077444263
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00120
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 1995

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

R100
NE
1/4-1/2
0.463 mi.
2443 ft.

BP AMOCO STATION
39-14 COLLEGE POINT BOULEVARD
FLUSHING, NY 11354

NY LTANKS
NY Spills
S108637396
N/A

Site 2 of 2 in cluster R

Relative:
Higher

LTANKS:

Actual:
36 ft.

Site ID: 191390
Spill Number/Closed Date: 9709624 / 12/21/2006
Spill Date: 11/19/1997
Spill Cause: Tank Overfill
Spill Source: Gasoline Station or other PBS Facility
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: VXBREUDO
Referred To: Not reported
Reported to Dept: 11/19/1997
CID: 257
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 11/19/1997
Spill Record Last Update: 5/22/2007
Spiller Name: CHUCK WEIN
Spiller Company: AMOCO SERVICE STATION
Spiller Address: 39-14 COLLEGE POINT BLVD
Spiller City,St,Zip: FUSHING, NY
Spiller County: 001
Spiller Contact: CHUCK WEIN
Spiller Phone: (201) 331-7021
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 23878
DEC Memo: 3/19/03 REASSIGNED FROM K. O'DOWD TO VOUGHT.12/4/03 Reassigned from Vought to Foley.File review:Avg depth to water: 27'Note: Mobil service station located across College Point Blvd (133-01 thru 133-11 Roosevelt Ave) has several monitoring and pumping wells and a remediation system on property.Subsurface hydrocarbon assessment report (Delta, 4/17/00)Soil samples collected from 6 borings around existing tank field returned with VOCs in excess of STARS guidance in SB-1B, SB-2 and SB-5A. On 2/7/00, four monitoring wells were installed. On 3/20/00 groundwater samples were collected. No LNAPL was detected. Between one and two VOCs were detected in all wells in excess of GWQS. Specifically MTBE, ranging from 555ppb(MW-2) to 142,000ppb(MW-4) and an elevated conc of benzene(4.4ppb) was detected in MW-3. No VOCs were detected in MW-5.Additional monitoring wells (MW-6,7,8 and 9) were installed in 8/01.From most recent monitoring report(4Q2002), total BTEX levels are relatively low in all wells (ND in all on 11/14/02). MTBE at 17200ppb (MW-1, 11/14/02), 7750ppb(MW-6, 11/14/02) and ND in MW-8 and MW-5.From Amoco spreadsheet provided 11/10/03, total BTEX ranges from ND to 22.8ppb(9/8/03) and MTBE ranges from ND to 2510ppb(9/8/03).SHAR Addendum (Delta, 9/25/03) submitted. Documents installation of one inch diameter MW-10.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BP AMOCO STATION (Continued)

S108637396

Installed to monitor gw conditions to the southwest and downgradient of site. GW at 16-31'bgs. Well was completed to 26'bgs. Soil sample at 18-20' did not show elevated levels of VOCs.3/16/04 3Q and 4Q 2003 monitoring reports received. 3Q 2003: BTEX from ND to 275ppb(MW-10). MTBE from ND to 2,510ppb(MW-6).4Q 2003: BTEX from ND to 216ppb(MW-10). MTBE from ND to 1,200ppb(MW-6).3/19/04 Received 1Q and 2Q 2003 monitoring reports.4/16/04 1Q 2004: BTEX from ND to 225ppb(MW-10). MTBE from ND to 1,200ppb(MW-6).8/6/04 2Q04 monitoring report received. BTEX from ND(MW-1,2,3,5,6,7,8,9) to 251ppb(MW-10). MTBE from ND(MW-5,8,9) to 991ppb (MW-6).4/12/05 3Q04 & 4Q04 monitoring reports received. DTW approx 16-31'bgs.3Q04- BTEX from ND(MW-1,2,3,5,6,7,8,9) to 192ppb(MW-10). MTBE from ND(MW-5,8,9) to 720ppb(MW-6)4Q04- BTEX from ND(MW-1,2,3,5,6,7,8,9) to 120ppb(MW-10). MTBE from ND(MW-5,8,9) to 313ppb(MW-6)9/16/05 1Q05- DTW 16.6-30.7'bgs. No LNAPL present. BTEX from ND(MW-1,2,3,5,6,7,8,9) to 97ppb(MW-10). MTBE from ND(MW-3,5,8,9) to 264ppb(MW-6).11/8/05: Reviewed quarterly monitoring report dated 11/1/05. Ten wells were sampled on 9/22/05. No free product. Max BTEX 72ppb(MW10) located at most downgradient well. General decreasing trend apparent.3/15/06 Reassigned from Foley to Tang. (KMF)12/13/06 Reassigned from Tang to Brevdo. (JS)12/21/06 Received Site Spill Inactivation Report, dated August 10, 2006. Reviewed. Provided verbal comments to Dave M. Taylor of Delta. Comments were addressed via replacement pages No. 16, 17, and 18. Closed the Spill and Issued NFA letter on December 21, 2006. (V. Brevdo)5/22/2007 Delta Environmental pulled tanks in April 2007 and now says the site is still contaminated. A new spill number was opened for the site - Spill #0702148

Remarks:

DURING THE CHANGING OF SPILL BUCKETS CALLER FOUND CONTAMINATED SOIL

Material:

Site ID: 191390
Operable Unit ID: 1052668
Operable Unit: 01
Material ID: 327964
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: True
Site ID: 191390
Operable Unit ID: 1052668
Operable Unit: 01
Material ID: 2106674
Material Code: 1213A
Material Name: MTBE (METHYL-TERT-BUTYL ETHER)
Case No.: 01634044
Material FA: Hazardous Material
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: True

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BP AMOCO STATION (Continued)

S108637396

Tank Test:

SPILLS:

Facility ID: 0702148
Facility Type: ER
DER Facility ID: 331223
Site ID: 381813
DEC Region: 2
Spill Date: 5/22/2007
Spill Number/Closed Date: 0702148 / 12/22/2011
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: rjfeng
Referred To: FENG: 3 GW SAMPLES USING GPROBE TEMP. WEL
Reported to Dept: 5/22/2007
CID: 444
Water Affected: Not reported
Spill Source: Gasoline Station or other PBS Facility
Spill Notifier: Federal Government
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 5/22/2007
Spill Record Last Update: 1/9/2012
Spiller Name: DAVID GREFFENIUS
Spiller Company: FORMER BP SERVICE #2016
Spiller Address: 39-14 COLLEGE POINT BLVD
Spiller City,St,Zip: FLUSHING, NY
Spiller Company: 001
Contact Name: DAVID GREFFENIUS
Contact Phone: (914) 765-8172
DEC Memo:

This site had a historical spill # 9709624. Delta Environmental submitted a "Site Spill Inactivation Report" dated Aug 10, 2006 claiming the site was clean, which was reviewed by Vadim Brevdo and closed out on 12/21/2006. In April 2007 Delta pulled the tanks at the site and now says that the site really was not clean. Delta will submit a new report soon. 8/21/2007 - Feng - Received the Tank Closure Report submitted by Delta. Talked to V. Brevdo. Case re-assigned to R. Feng as per V. Brevdo. (RJF)10/10/2007 - Feng - Portfolio meeting with BP and Delta. All tanks and dispensers and piping were removed. Delta will collect 3 groundwater samples by temporary GeoProbe points to confirm the groundwater quality. 3 groundwater samples include, 1 from tank area, dispensers area and the P-6 piping area where the soil exhibit the exceedances. (RJF)10/17/2007 - Feng - Underground Storage Tank Excavation Assessment Report, July 10, 2007, by Delta. Site divestment. This report summarizes the excavation of 4 (4,000-gallon) double-walled steel gasoline USTs from a single tank cavity, associated lines and pump islands, and 2 abandoned off-site fills and associated piping. Soil samples were collected subsequent to tank excavation, soil post-excavation and over-excavation. Some

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BP AMOCO STATION (Continued)

S108637396

exceednaces of TAGM 4046 were detected. B-1, 3,350 ppb Xylenes. SB-2, 6,310 ppb Xylenes. SB-3, 2,120 ppb Xylenes. B-7, 5,910 ppb Xylenes. Delta requested spill closure based on the information presented in the Site Spill Inactivation Report dated 8/10/2006. DEC require during 10/10/2007 meeting to have 3 groundwater samples from the former tank area, dispenser area and the piping area to confirm the groundwater quality before the spill closure. (RJF)3/20/2008 - Feng - Email to BP for status of groundwater sampling. (RJF)6/18/2008 - Feng - Portfolio meeting with BP and Delta. BP/Delta will do the 3 soil and groundwater samples as agreed in the previous meeting. No work plan will be needed. The site is potentially for development, but unclear what to build yet at this time. The site is currently vacant. (RJF)10/21/2008 - Letter from Delta, dated June 12, 2008. Requesting spill closure. enclosed with a copy of the spill closure letter for spill no. 97-09624. (RJF)12/17/2008 - Reviewed the Delineation Soil Borings - December 2008 work plan, dated 12/12/2008, submitted by Delta. Delat proposed to install 6 soil borings near the previous SB-1 area. Comments are provided to Delta. 1) submit the previous investigation report, 2) soil boring must be installed 5 feet past groundwater interface. Need revised work plan. (RJF)2/20/2009 - Reviewed Confirmatory Assessment Report, dated 1/12/2009, by Delta. On July 10 and 11, 2008, Associated Environmental, under supervision of EnviroTrac and on behalf of Atlantic Richfield, advanced three soil borings using GeoProbe. 4 soil samples were collected. SB-1 at 8-8.5 feet with high concentration of VOCs, ug/kg, 330 benzene, 710 toluene, 13,000 ethylbenzene, 94,000 xylenes, 420 MTBE, 76,000 1,2,4-Trimethylbenzene, 23,000 1,3,5-Trimethylbenzene, 230,850 total VOCs. Groundwater was encountered at 29 feet. 2 groundwater samples were collected, SB-1 and SB-3. SB-3 shows 91 ug/L MTBE. The rest are low. Delta intends to conduct additional soil borings in the area west of the former UST field on site in order to futher delineate soil impact. Work plan will be submitted. (RJF)7/13/2009 - Reviewed Delineation Assessment Report, dated May 27, 2009, by Delta. On December 17 and 23, 2008, Assciated Environmental advanced six soil borings, SB-4, SB-5, SB-6, SB-7, SB-8 and SB-9 using GeoProbe. SB-7 and SB-9 hit refusal at depths between 2.5 and 6 feet bg and no soil samples nor groundwater samples were collected from these borings. SB-5, SB-6, SB-8 were advanced 5-8 above water table. SB-4 was installed 8 feet past groundwater water. Eleven soil samples were taken. SB-4 (8-8.5'), ND. SB-4 (14-14.5'), 150J benzene, 1,380 xylene, 1,830 BTEX, 3,200 MTBE. SB-4 (20.5-21'), ND. SB-4 (34.5-35'), ND. SB-5 (8-8.5'), 3,800 MTBE. SB-5 (16-16.5'), ND. SB-6 (8-8.5'), 5,300 xylenes, 8,300 BTEX, 220J MTBE, 34,000 1,2,4-Trimethylbenzene, 3,600 1,3,5-Trimethylbenzene, 58,830 total VOCs. SB-6 (16-16.5'), ND. SB-8 (8-8.5'), ND. SB-8 (18-18.5'), ND. SB-8 (26-26.5'), ND. One groundwater was collected from SB-4, 15 ug/L MTBE. The subject site is tentatively planned for redevelopment as a new hotel facility. Delta will maintain contact with the property owner/representatives to determine if any soil excavation activities are planned as part of the redevelopment (particularly at the northwestern corner of the subject site). (RJF)7/15/2009 - Reviewed Phase II Environmental Site Assessment, dated March 16, 2009, by Advanced Cleanup Technology, Inc. 3 soil borings/monitoring wells were advanced. Soil samples were collected from SB-01 and SB-02 at 8-10 feet bg. Soil samples were collected from SB-03 at 5-7 feet and 8-10 feet bg due to a discolored layer of shallow soil. Soil analyticals show low/ND VOCs. 3 monitoring wells were installed. Groundwater flows to west. DTW

BP AMOCO STATION (Continued)

S108637396

26.94' to 29.03' bg. 3 groundwater samples were taken. NO VOCs exceedances, except 46 ug/L MTBE in MW-02. ACT recommended excavation of impacted soil, installation of sub-slab depressurization system and coordinate the remediation with DEC and BP. (RJF)08/06/2010: This spill was temporarily (for 6 months) transferred to A. Doronova. - AD4/11/2011 - Spill transferred back to JFeng.11/14/2011 - email from Chris Meyer of Antea Group "Hello June Attached is the excavation summary and closure request for the above-referenced former BP Station property. As part of the ongoing development, the entire footprint of the former station property was excavated and the soil removed. This included the areas of previously identified soil impacts. This letter summarizes the confirmatory soil sampling that was conducted and requests that NYSDEC Number 07-02148 be granted "Closed" status. The final file was >150MB in size, so we opted to send you this electronic version, which does not include the disposal manifests. A CD is also being sent to your attention, which includes this report and all of the disposal documentation for the >6,500 tons of soil, removed from the site. Should you have any questions, please give me a call. We look forward to hearing from you on this matter. Thank you. Chris12/20/11 - Raphael Ketani. Chris Meyer of Antea Group sent me the 11/11/11 Excavation Summary Report by e-mail. He requested that the DEC close the spill case and issue an NFA letter. I reviewed the report. I noted that they had described excavating the contaminated soil in the northwest corner of the site where the 4,000 gal. tanks had been. The 8/22/11 soil end point results for GS-1 (next to SB-1) and GS-2 (next to SB-4) were almost non-detect. However, no excavation, nor end points were performed next to SB-6, which had up to 34,000 ppb of 1,2,4-trimethylbenzene and three other exceedances of individual VOC concentrations. Also, I could not find a PBS registration for the tanks. This was a violation of 6NYCRR Part 612. Lastly, I could not find the CD with the tickets and manifests. As a result of this missing information and the PBS violation, I could not close the spill case. I sent the following e-mail to Mr. Meyer:Chris:I have reviewed the closure report. The diagram did not show that soil end point samples were taken at the location of SB-6. The 2008 sample from this location had up to 34,000 ppb of 1,2,4-trimethylbenzene, plus three other exceedances that were over 1,000 ppb. Also, I could not find a PBS registration for the tanks that were removed. This is a violation of 6NYCRR Part 612. Therefore, I can not close this spill case and issue an NFA letter. Also, I could not locate the CD with the tickets and manifests. The DEC must have this information and it must be in the form of pdf files that are no larger than 50 MB.Please submit the required information as soon as possible.12/21/11 - Raphael Ketani. Mr. Meyer responded back by e-mail. He pointed out that it was stated in the Excavation Summary Report that the entire station site had been dug out to 15 feet below grade. I re-read the report and found the statement that the entire site had been dug out. Next, he wrote that the PBS registration is #2-602004. I checked this registration and did find the site with listings for the four 4,000 gal. USTs as being closed and removed on 1/1/86. It was very strange that I could not find the registration despite using 4 different addresses for the site. In my response to this e-mail, I pointed out that the DEC still needed the tickets and manifests and that this will hold up closing the spill case. I asked him to send the CD. 12/22/11 - Raphael Ketani. Mr. Meyer sent me the CD with the entire collection of manifests. The latest date was 8/11/11. These were the last pieces of documentation

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

BP AMOCO STATION (Continued)

S108637396

that were required by the Department in order confirm that the remediation had taken place. As the information in the case file and the e-docs indicates that the spill has been remediated and as the threat to the public and the environment is minimal from any remaining contamination, I have closed the spill case. 1/9/12 - Raphael Ketani. Mr. Meyer sent me the owner's address. It is: John Hsu, Pane Stone Construction, 35-06 Farrington Street, Flushing, NY 11354, (718)353-2239. The SCL was sent to Mr. Onufrak, Mr. Hinshalwood and Mr. Meyer.

Remarks: SOIL SAMPLES CAME BACK WITH CONTAMINATED SOIL; TANKS WERE REMOVED

Material:

Site ID: 381813
 Operable Unit ID: 1139241
 Operable Unit: 01
 Material ID: 2129260
 Material Code: 0066A
 Material Name: UNKNOWN PETROLEUM
 Case No.: Not reported
 Material FA: Petroleum
 Quantity: 0
 Units: Gallons
 Recovered: No
 Resource Affected: Not reported
 Oxygenate: False

Tank Test:

T101
 NNW
 1/4-1/2
 0.463 mi.
 2445 ft.

TRADING USED AUTO PARTS CORP
127-02 35TH AVE
CORONA, NY 11368
 Site 3 of 3 in cluster T

NY SWF/LF
 NY Spills S108146167
 N/A

Relative:
 Higher

SWF/LF:
 Flag: INACTIVE
 Region Code: 2
 Phone Number: Not reported
 Owner Name: Not reported
 Owner Type: Not reported
 Owner Address: Not reported
 Owner Addr2: Not reported
 Owner City,St,Zip: Not reported
 Owner Email: Not reported
 Owner Phone: Not reported
 Contact Name: Not reported
 Contact Address: Not reported
 Contact Addr2: Not reported
 Contact City,St,Zip: Not reported
 Contact Email: Not reported
 Contact Phone: Not reported
 Activity Desc: Vehicle Dismantling
 Activity Number: Not reported
 Active: No
 East Coordinate: 597573
 North Coordinate: 4512708
 Accuracy Code: Not reported

Actual:
 13 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRADING USED AUTO PARTS CORP (Continued)

S108146167

Regulatory Status: Not reported
Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

SPILLS:

Facility ID: 0007548
Facility Type: ER
DER Facility ID: 251258
Site ID: 311429
DEC Region: 2
Spill Date: 9/27/2000
Spill Number/Closed Date: 0007548 / 4/3/2006
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 4101
Investigator: rvketani
Referred To: Not reported
Reported to Dept: 9/27/2000
CID: 312
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: DEC
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/27/2000
Spill Record Last Update: 4/3/2006
Spiller Name: Not reported
Spiller Company: TRADING USED AUTO PARTS
Spiller Address: 127-02A 35TH AV
Spiller City,St,Zip: WHITESTONE, NY
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIPPLE"12/14/04 TJDRereassigned Tipple >>> DeMeo1/9/06 - Raphael Ketani. I have no information or file on this case. The phone number in the Queens "white pages" is (718) 396-0766. I called the number and the secretary answered saying that the owner is Killian. She said he would be back on thursday. On Property Shark: owner Killian Zavala, Trading Used Auto Parts, 127-02 35 Ave., Flushing, NY, 11363 home Killian Zavala, 200 Adams St., Bedford Hills, NY, 10507-1910 president Elaine J. Gelardi, Magrut Corp., 171-04 Pidgeon Meadow Road, Flushing, NY, 11365I will send a contaminated soil letter. The PBS case is #2-605829 with 1 275 gal. waste oil tank in service.3/17/06 - Raphael Ketani. I received a call from Andrew Gershon, Assistant Attorney General in the NYS Dept. of Law regarding the site. He said he is sending out a "Notice of Violation" as they didn't fulfill their agreements for doing work and submitting documentation.3/23/06 - Raphael Ketani. I had an impromptu meeting with Killian Zavala (cell (914) 715-9006), owner of the site and

MAP FINDINGS

TRADING USED AUTO PARTS CORP (Continued)

S108146167

business. He said that he had just found my unopened January 9, 2006 letter on his desk and wanted to talk to me about the site. He said that the environmental firm IVI did a phase II 2 to 3 years ago on his site and took soil samples. He said that he has duplicate documents of the analytical results and other documentation at home. He said he will hand deliver them to me today. I told him I will review the documents and make a site visit and determine what the next step is. However, I told him, Mr. Andrew Gershon, Esquire, of the NYS Dept. of Law is instituting action against Trading Used Auto Parts as Mr. Zavala has not cleaned up the site. I told Mr. Zavala that he should talk to Mr. Gershon. He said he will. Today I received the below e-mail from Andrew Gershon, Assistant Attorney General NYS DOL:(212) 416-8474 March 4, 2004 NOTICE OF VIOLATION OF INTERIM COURT ORDER Certified Mail, Return Receipt Requested Kilian Zavala Trading Used Auto Parts Corp. 127-02 35th Avenue Corona, New York 11368 Re: Spitzer, et al. v. Trading Used Auto Parts Corp, Robert Tume, and George Hernandez, and Kilian Zavala, Index No. 11181/2001 (Sup.Ct, Queens County) Dear Mr. Zavala: On March 4, 2004, we sent you the attached letter demanding submission of the report on the subsurface investigation done by IVI, the consultant for defendants Trading Used Auto Parts Corp, Robert Tume, and George Hernandez, and Kilian Zavala (collectively "Trading") as required under the Interim Order in this action. More than two years have passed without submission of the report. The State is therefore issuing this Notice Of Violation for failure to submit the report, as required under Paragraphs 16-18 of the Interim Order. Under Paragraph 20 of the Interim Order: Trading shall, upon plaintiffs' service of a notice of violation of this Stipulation and Order, immediately stop (i) any further dismantling at the Facility by anyone and (ii) by Trading at any other location. Following the service of such a notice, the dismantling described in clauses (i) and (ii) above shall remain prohibited unless and until the alleged violations set forth in the notice are remedied and any attendant penalty paid or, if the notice of violation is challenged by Trading, are resolved in the Trading's favor under the procedures specified in paragraph 24 below. Trading must therefore cease dismantling activities until the required report is submitted. As to a financial penalty, Trading is liable for stipulated penalties in accordance with the following schedule for failing to submit the report in accordance with the following schedule: PERIOD OF LATE SUBMITTAL PENALTY PER-DAY 1st day through 7th day \$100 8th day through 14th day \$150 Each day beyond the 14th day \$300 Trading is therefore subject to stipulated penalties of over \$100,000 under the Interim Order for its failure to submit the report. However, the State will give Trading one more opportunity to avoid a financial penalty. If Trading submits the report by Friday, April 14, 2006, the State will refrain from assessing penalties. If Trading fails to submit the report by that date, or is found to be engaged in dismantling before submitting the report, the State will pursue penalties. Copies of the report should be submitted to: Rafael Ketani, P.E., Division of Environmental Remediation New York State Department of Environmental Conservation Region 247-40 21st Street Long Island City, NY 11101 718-482-4634 (fax) 718-482-4098 <rvketani@gw.dec.state.ny.us> and: Andrew J. Gershon Assistant Attorney General New York State Department of Law Environmental Protection Bureau 120 Broadway, 26th Floor New York, NY 10271 (212) 416-8474 fax (212) 416-6007 <Andrew.Gershon@oag.state.ny.us> Please feel free to call me

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRADING USED AUTO PARTS CORP (Continued)

S108146167

with any questions at 212-416-8474. Very truly yours, ANDREW J. GERSHON Assistant Attorney General cc: Rafael Ketani, P.E. Later this afternoon, Mr. Zavala dropped off the phase II investigation plans and the best management plan from 1/1.3/24/06 - Raphael Ketani. I reviewed the PROPOSAL Phase II Environmental Site Assessment plan revised March 11, 2002, the Phase II Environmental Site Assessment Workplan dated April 22, 2002, and the Storm Water Pollution Prevention Plan and Best Management Practices final revision March 21, 2003. The Phase II ESAW depicts only 3 borings for investigating the subsurface soils. This may not be enough for even such a small site (1/4 acre). I will have to arrange a site visit. 3/27/06 - Raphael Ketani. On 3/24, I received the Phase II Environmental Site Assessment from Mr. Zavala dated November 10, 2003. I reviewed the report today and saw that the only soil analyte consistently exceeding TAGM was benzo(a)pyrene - a maximum of 1.8 ppm. Two other SVOCs had one exceedence each. Regarding groundwater, only MW-3 had many exceedences. These were all VOCs and were all just slightly above TAGM, with the exception of MTBE. MTBE ranged from 22 ppb to 100 ppb. There were 8 borings (3 turned into wells) on the site. 3/28/06 - Raphael Ketani. I set up a site visit at 12 noon for 3/29/06 with Mr. Zavala. 3/29/06 - Raphael Ketani. I received the following e-mail today from Andrew Gershon, Assistant Attorney General, NYSDOL: I have an open case, but go ahead and close it. Send me a copy of the letter. I'll then wrap up my case. Andrew J. Gershon Assistant Attorney General New York State Department of Law Environmental Protection Bureau 120 Broadway, 26th Floor New York, NY 10271 (212) 416-8474 fax (212) 416-6007 <Andrew.Gershon@oag.state.ny.us>>>> "Raphael Ketani" <rvketani@gw.dec.state.ny.us> 03/29/06 4:20 PM>>> CONFIDENTIAL I made a site visit at 12 noon today to Trading and met Mr. Zavala. We went over the site together. I found them to be doing a reasonably good job of keeping things clean, though I had to point out a small oil spill (maybe 6 oz.) from sloppy filling of the used oil tank. Otherwise, things looked good and like they were following the Best Management Plan. They could be a little better organized, but I thought they were alright. I have the site investigation plan and the site assessment report. The report looked good as it showed only slight contamination - at or just above TAGM 4046. I'd like to close the case. Do you have an open case against Trading? If so, would my closing the spill case affect your case? Let me know or I won't close this case. 4/3/06 - Raphael Ketani. I have reviewed the Phase II Environmental Site Assessment Workplan, the Storm Water Pollution Prevention Plan and Best Management Practices, and the Phase II Environmental Site Assessment. I also made a site visit on 3/29/06. All of these were found to be acceptable to the Department. Therefore, I am closing the spill case.

Remarks:

Not reported

Material:

Site ID: 311429
Operable Unit ID: 830166
Operable Unit: 01
Material ID: 545085
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRADING USED AUTO PARTS CORP (Continued)

S108146167

Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

102
ENE
1/4-1/2
0.465 mi.
2457 ft.

133-01 SANFORD AVE/QUEENS
133-01 SANFORD AVE
NEW YORK CITY, NY

NY LTANKS S102671231
N/A

Relative:
Higher

LTANKS:

Actual:
31 ft.

Site ID: 265916
Spill Number/Closed Date: 8708774 / 1/14/1988
Spill Date: 1/14/1988
Spill Cause: Tank Overfill
Spill Source: Private Dwelling
Spill Class: Not reported
Cleanup Ceased: 1/14/1988
Cleanup Meets Standard: True
SWIS: 4101
Investigator: RWAUSTIN
Referred To: Not reported
Reported to Dept: 1/14/1988
CID: Not reported
Water Affected: Not reported
Spill Notifier: Fire Department
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 1/22/1988
Spill Record Last Update: 3/13/1989
Spiller Name: Not reported
Spiller Company: PRIME OIL
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 216681
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "AUSTIN"

Remarks: TANK OVERFILL CAUSED SPILL IN BASEMENT AND ON SIDEWALK. NO IMPACT TO SEWERS OR SOIL, ACCORDING TO FIRE DEPT, NO ACTION REQUIRED BY DEC.

Material:

Site ID: 265916
Operable Unit ID: 913438
Operable Unit: 01
Material ID: 464142
Material Code: 0003A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

133-01 SANFORD AVE/QUEENS (Continued)

S102671231

Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 75
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

S103
North
1/4-1/2
0.479 mi.
2531 ft.

LOT 215,TAXBLOCK 1833
127-92 WILLETS POINT BLVD
QUEENS, NY 11368
Site 4 of 4 in cluster S

NY LTANKS
NY E DESIGNATION

S109527709
N/A

Relative:
Higher

LTANKS:

Actual:
10 ft.

Site ID: 158731
Spill Number/Closed Date: 9906470 / 11/17/1999
Spill Date: 8/31/1999
Spill Cause: Tank Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4101
Investigator: SMSANGES
Referred To: Not reported
Reported to Dept: 8/31/1999
CID: 388
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 8/31/1999
Spill Record Last Update: 11/17/1999
Spiller Name: JOHN FEDORA
Spiller Company: FODERA FOODS
Spiller Address: 127-92 WILLETS PT BLVD
Spiller City,St,Zip: QUEENS, NY
Spiller County: 001
Spiller Contact: CALLER
Spiller Phone: (516) 586-4900
Spiller Extention: Not reported
DEC Region: 2
DER Facility ID: 134127
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SANGESLAND" TOM McGLENNON-VOLUMETRIC TECHNIQUES LTD/STRUX CORP (631-472-4848) SUBMITTED A CLOSE OUT PACKAGE ON OCT 6, 1999 TANK WAS DRAINED AND REMOVED. ANY CONTAMINATED SOIL IN THE AREA WAS REMOVED (MANIFESTS SHOWN) CLOSE OUT PACKAGE INCLUDED: 1) LIQUID DISPOSAL MANIFEST, 2) MANIFEST AND ANALYSIS FOR CONTAMINATED SOIL, 3) AFFIDAVIT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Remarks: OF TANK CLEANING AND DISPOSAL, 4)END POINT SAMPLE.SITE CLOSED
caller reports they were reomving tank and found contamination. mark
tibbe is en route as per caller.

Material:

Site ID: 158731
Operable Unit ID: 1080913
Operable Unit: 01
Material ID: 299197
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

E DESIGNATION:

Tax Lot(s): 215
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Air Quality - #2 Fuel Oil or Natural Gas Heat and Hot Water
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: FODERA ENTERPRISES
Lot Area: 000128949
Total Building Floor Area: 00000093755

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Commercial Floor Area: 00000093755
Office Floor Area: 00000016350
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000057515
Factory Floor Area: 00000000000
Other Floor Area: 00000019890
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00005
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0316.00
Lot Depth: 0100.00
Building Frontage: 0080.00
Building Depth: 0155.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000751500
Total Assessed Value: 00001323000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1939
Year Built Code: E
Year Altered1: 2001
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.73
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330215
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028645
Y Coordinate: 0216531
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 215
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Ulurp Number: 080381ZMQ
Zoning Map No: 10a 10b
Description: Exhaust stack location limitations
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: FODERA ENTERPRISES
Lot Area: 000128949
Total Building Floor Area: 00000093755
Commercial Floor Area: 00000093755
Office Floor Area: 00000016350
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000057515
Factory Floor Area: 00000000000
Other Floor Area: 00000019890
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00005
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0316.00
Lot Depth: 0100.00
Building Frontage: 0080.00
Building Depth: 0155.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000751500
Total Assessed Value: 00001323000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1939
Year Built Code: E
Year Altered1: 2001
Year Altered2: 0000
Historic District Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Landmark Name:	Not reported
Built Floor Area Ratio-Far:	0000.73
Maximum Allowable Far:	02.00
Borough Code:	4
Borough Tax Block And Lot:	4018330215
Condominium Number:	00000
Census Tract 2:	0383
X Coordinate:	1028645
Y Coordinate:	0216531
Zoning Map:	10A
Sanborn Map:	419 029
Tax Map:	41004
E Designation No:	Not reported
Date of RPAD Data:	11/2005
Date of DCAS Data:	01/2006
Date of Zoning Data:	11/2005
Date of Major Property Data:	11/2005
Date of Landmark Data:	12/2005
Date of Base Map Data:	01/2006
Date of Mass Appraisal Data:	11/2005
Date of Political and Adm Data:	08/2005
Pluto-Base Map Indicator:	1
Tax Lot(s):	215
E-No:	E-214
Effective Date:	11/13/2008
Satisfaction Date:	Not reported
Ceqr Number:	07DME014Q
Ulurp Number:	080381ZMQ
Zoning Map No:	10a 10b
Description:	Hazardous Materials* Phase and Phase II Testing Protocol
Borough Code:	QN
Community District:	407
Census Tract:	383
Census Block:	1006
School District:	25
City Council District:	21
Fire Company:	L129
Health Area:	43
Police Precinct:	110
Zone District 1:	M3-1
Zone District 2:	Not reported
Commercial Overlay1:	Not reported
Commercial Overlay2:	Not reported
Special Purpose District1:	Not reported
Special Purpose District2:	Not reported
All Components1:	M3-1
All Components2:	Not reported
Split Boundary Indicator:	N
Building Class:	E9
Land Use Category:	06
Number of Easements:	0
Owner, Type of Code:	P
Owner Name:	FODERA ENTERPRISES
Lot Area:	000128949
Total Building Floor Area:	00000093755
Commercial Floor Area:	00000093755

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Office Floor Area: 00000016350
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000057515
Factory Floor Area: 00000000000
Other Floor Area: 00000019890
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00005
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0316.00
Lot Depth: 0100.00
Building Frontage: 0080.00
Building Depth: 0155.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000751500
Total Assessed Value: 00001323000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1939
Year Built Code: E
Year Altered1: 2001
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported
Built Floor Area Ratio-Far: 0000.73
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330215
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028645
Y Coordinate: 0216531
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

Tax Lot(s): 215
E-No: E-214
Effective Date: 11/13/2008
Satisfaction Date: Not reported
Ceqr Number: 07DME014Q
Ulurp Number: 080381ZMQ

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Zoning Map No: 10a 10b
Description: Window Wall Attenuation & Alternate Ventilation
Borough Code: QN
Community District: 407
Census Tract: 383
Census Block: 1006
School District: 25
City Council District: 21
Fire Company: L129
Health Area: 43
Police Precinct: 110
Zone District 1: M3-1
Zone District 2: Not reported
Commercial Overlay1: Not reported
Commercial Overlay2: Not reported
Special Purpose District1: Not reported
Special Purpose District2: Not reported
All Components1: M3-1
All Components2: Not reported
Split Boundary Indicator: N
Building Class: E9
Land Use Category: 06
Number of Easements: 0
Owner, Type of Code: P
Owner Name: FODERA ENTERPRISES
Lot Area: 000128949
Total Building Floor Area: 00000093755
Commercial Floor Area: 00000093755
Office Floor Area: 00000016350
Retail Floor Area: 00000000000
Garage Floor Area: 00000000000
Storage Floor Area: 00000057515
Factory Floor Area: 00000000000
Other Floor Area: 00000019890
Floor Area,Total Bld Source Code: 7
Number of Buildings: 00005
Number of Floors: 002.00
Residential Units: 00000
Non and Residential Units: 00001
Lot Frontage: 0316.00
Lot Depth: 0100.00
Building Frontage: 0080.00
Building Depth: 0155.00
Proximity Code: 0
Irregular Lot Code: Y
Lot Type: 5
Basement Type Grade: 5
Land Assessed Value: 00000751500
Total Assessed Value: 00001323000
Land Exempt Value: 00000000000
Total Exempt Value: 00000000000
Year Built: 1939
Year Built Code: E
Year Altered1: 2001
Year Altered2: 0000
Historic District Name: Not reported
Landmark Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOT 215,TAXBLOCK 1833 (Continued)

S109527709

Built Floor Area Ratio-Far: 0000.73
Maximum Allowable Far: 02.00
Borough Code: 4
Borough Tax Block And Lot: 4018330215
Condominium Number: 00000
Census Tract 2: 0383
X Coordinate: 1028645
Y Coordinate: 0216531
Zoning Map: 10A
Sanborn Map: 419 029
Tax Map: 41004
E Designation No: Not reported
Date of RPAD Data: 11/2005
Date of DCAS Data: 01/2006
Date of Zoning Data: 11/2005
Date of Major Property Data: 11/2005
Date of Landmark Data: 12/2005
Date of Base Map Data: 01/2006
Date of Mass Appraisal Data: 11/2005
Date of Political and Adm Data: 08/2005
Pluto-Base Map Indicator: 1

**104
SE
1/4-1/2
0.492 mi.
2597 ft.**

**COLLEGE PT BLVD @ 57TH AV
COLLEGE PT BLVD @ 57TH AV
FLUSHING, NY**

**NY LTANKS S100142691
N/A**

**Relative:
Higher**

LTANKS:

**Actual:
25 ft.**

Site ID: 163876
Spill Number/Closed Date: 8900716 / 4/24/1989
Spill Date: 4/21/1989
Spill Cause: Tank Failure
Spill Source: Tank Truck
Spill Class: Not reported
Cleanup Ceased: 4/24/1989
Cleanup Meets Standard: True
SWIS: 4101
Investigator: FINGER
Referred To: Not reported
Reported to Dept: 4/24/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 4/25/1989
Spill Record Last Update: 1/14/2004
Spiller Name: Not reported
Spiller Company: JANIY & SONS
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COLLEGE PT BLVD @ 57TH AV (Continued)

S100142691

DEC Region: 2
DER Facility ID: 138207
DEC Memo: Not reported
Remarks: SOLUTION : 85% WATER, 3%-6% TETRA SODIUM EDTA, 1%-2% ALKALINE METASIL-IATE. SPILL RECOVERED BY MARINE POLLUTION CONTROL. FD & PD BLOCK-ED DRAINS. DEP(P WONG) ON SCENE. CALLED DEP TO CONFIRM CLEANUP

Material:

Site ID: 163876
Operable Unit ID: 926953
Operable Unit: 01
Material ID: 567920
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 400
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Count: 3 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CORONA	S111158620	FORMER TIFFANYS STUDIOS	96-18 43RD AVENUE	11368	NY SHWS, NY Spills
FLUSHING	S113916737	32ND AVENUE AND FARRINGTON STREET	32ND AVENUE AND FARRINGTON STR	11354	NY SHWS
FLUSHING	S108984453	FLUSHING INDUSTRIAL PARK (WESTERN)	NW CORNER OF COLLEGE PT BLVD &	11354	NY ENG CONTROLS, NY INST CONTROL, NY VCP, NY BROWNFIELD

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/16/2014	Source: EPA
Date Data Arrived at EDR: 01/08/2015	Telephone: N/A
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 01/08/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/16/2014	Source: EPA
Date Data Arrived at EDR: 01/08/2015	Telephone: N/A
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 01/08/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/16/2014	Source: EPA
Date Data Arrived at EDR: 01/08/2015	Telephone: N/A
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 01/08/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/27/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/08/2015
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/21/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/07/2014	Telephone: 703-603-8704
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 01/09/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/27/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/08/2015
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/19/2014	Telephone: 703-603-0695
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 02/26/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 06/15/2015
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/19/2014	Telephone: 703-603-0695
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 02/26/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 06/15/2015
	Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/03/2014	Source: Department of the Navy
Date Data Arrived at EDR: 12/12/2014	Telephone: 843-820-7326
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 02/16/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/29/2014	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 09/30/2014	Telephone: 202-267-2180
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 12/29/2014
Number of Days to Update: 37	Next Scheduled EDR Contact: 04/13/2015
	Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 02/16/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/18/2015	Telephone: 518-402-9622
Date Made Active in Reports: 02/27/2015	Last EDR Contact: 02/18/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

VAPOR REOPENED: Vapor Intrusion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 11/01/2014	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/19/2014	Telephone: 518-402-9814
Date Made Active in Reports: 01/12/2015	Last EDR Contact: 02/20/2015
Number of Days to Update: 54	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/06/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 01/08/2015	Telephone: 518-457-2051
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/05/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 02/16/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/18/2015	Telephone: 518-402-9549
Date Made Active in Reports: 02/27/2015	Last EDR Contact: 02/18/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/08/2005	Telephone: 518-402-9549
Date Made Active in Reports: 07/14/2005	Last EDR Contact: 07/07/2005
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013	Source: EPA Region 1
Date Data Arrived at EDR: 05/01/2013	Telephone: 617-918-1313
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 01/30/2015
Number of Days to Update: 184	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015	Source: EPA Region 10
Date Data Arrived at EDR: 02/12/2015	Telephone: 206-553-2857
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 29	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 01/08/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 01/30/2015	Source: EPA, Region 5
Date Data Arrived at EDR: 02/05/2015	Telephone: 312-886-7439
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014	Source: EPA Region 4
Date Data Arrived at EDR: 03/03/2015	Telephone: 404-562-8677
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/23/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/10/2015	Telephone: 214-665-6597
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 01/28/2015	Source: EPA Region 8
Date Data Arrived at EDR: 01/30/2015	Telephone: 303-312-6271
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 42	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal registered storage tank lists

TANKS: Storage Tank Facility Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 12/29/2014	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 12/30/2014	Telephone: 518-402-9543
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 12/30/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/13/2015
	Data Release Frequency: Quarterly

UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 12/29/2014	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 12/30/2014	Telephone: 518-402-9549
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 12/30/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/13/2015
	Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002	Source: NYSDEC
Date Data Arrived at EDR: 02/20/2002	Telephone: 518-402-9549
Date Made Active in Reports: 03/22/2002	Last EDR Contact: 10/24/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/23/2006
	Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002	Source: NYSDEC
Date Data Arrived at EDR: 02/20/2002	Telephone: 518-402-9549
Date Made Active in Reports: 03/22/2002	Last EDR Contact: 07/25/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 10/24/2005
	Data Release Frequency: No Update Planned

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 12/29/2014	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 12/30/2014	Telephone: 518-402-9549
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 12/30/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/13/2015
	Data Release Frequency: No Update Planned

CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

Date of Government Version: 01/01/2002	Source: NYSDEC
Date Data Arrived at EDR: 02/20/2002	Telephone: 518-402-9549
Date Made Active in Reports: 03/22/2002	Last EDR Contact: 07/25/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 10/24/2005
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 12/30/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 12/30/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 36

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/23/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/13/2015	Telephone: 214-665-7591
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/29/2015	Source: EPA Region 8
Date Data Arrived at EDR: 01/30/2015	Telephone: 303-312-6137
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 42	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014	Source: EPA Region 9
Date Data Arrived at EDR: 02/13/2015	Telephone: 415-972-3368
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/03/2015	Source: EPA Region 10
Date Data Arrived at EDR: 02/12/2015	Telephone: 206-553-2857
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 01/26/2015
Number of Days to Update: 29	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 01/12/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 04/27/2015
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 02/16/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/18/2015	Telephone: 518-402-9553
Date Made Active in Reports: 02/27/2015	Last EDR Contact: 02/18/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 02/16/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/18/2015	Telephone: 518-402-9553
Date Made Active in Reports: 02/27/2015	Last EDR Contact: 02/18/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Quarterly

ENV RES DECL: Environmental Restrictive Declarations

The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 11/21/2014	Source: New York City Department of City Planning
Date Data Arrived at EDR: 12/24/2014	Telephone: 212-720-3300
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 12/22/2014
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/06/2015
	Data Release Frequency: Varies

RES DECL: Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/18/2010	Source: NYC Department of City Planning
Date Data Arrived at EDR: 06/30/2014	Telephone: 212-720-3401
Date Made Active in Reports: 07/21/2014	Last EDR Contact: 12/24/2014
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/06/2015
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 02/16/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/18/2015	Telephone: 518-402-9711
Date Made Active in Reports: 02/27/2015	Last EDR Contact: 02/18/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/01/2015
	Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/31/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

State and tribal Brownfields sites

ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a \$200 million Environmental Restoration or Brownfields Fund as part of the \$1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 02/16/2015
Date Data Arrived at EDR: 02/18/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 9

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 02/16/2015
Date Data Arrived at EDR: 02/18/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 9

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 38

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/22/2014
Next Scheduled EDR Contact: 04/06/2015
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 01/26/2015
Number of Days to Update: 137	Next Scheduled EDR Contact: 05/11/2015
	Data Release Frequency: No Update Planned

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 01/06/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 01/08/2015	Telephone: 518-402-8705
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/05/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Semi-Annually

SWTIRE: Registered Waste Tire Storage & Facility List

A listing of facilities registered to accept waste tires.

Date of Government Version: 08/01/2006	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/15/2006	Telephone: 518-402-8694
Date Made Active in Reports: 11/30/2006	Last EDR Contact: 01/19/2015
Number of Days to Update: 15	Next Scheduled EDR Contact: 05/04/2015
	Data Release Frequency: Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 02/02/2015
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/18/2015
	Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/10/2014
Date Data Arrived at EDR: 12/01/2014
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 70

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Quarterly

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 02/16/2015
Date Data Arrived at EDR: 02/18/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 9

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Annually

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/10/2014
Date Data Arrived at EDR: 12/01/2014
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 70

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: Varies

HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 02/09/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 15

Source: Office of the State Comptroller
Telephone: 518-474-9034
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 69

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/30/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 02/16/2015
Date Data Arrived at EDR: 02/18/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 9

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/07/2013
Number of Days to Update: 63

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/12/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/29/2014	Telephone: (212) 637-3660
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 12/29/2014
Number of Days to Update: 31	Next Scheduled EDR Contact: 04/13/2015
	Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 02/03/2015
Number of Days to Update: 42	Next Scheduled EDR Contact: 05/18/2015
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/15/2015
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/27/2015
	Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/10/2014	Telephone: 202-528-4285
Date Made Active in Reports: 09/18/2014	Last EDR Contact: 03/13/2015
Number of Days to Update: 8	Next Scheduled EDR Contact: 06/22/2015
	Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 24

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/24/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 12/30/2014
Date Data Arrived at EDR: 12/31/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/06/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/22/2014
Next Scheduled EDR Contact: 04/06/2015
Data Release Frequency: Every 4 Years

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 01/09/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 04/27/2015
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 01/16/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 04/27/2015
	Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/29/2014	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 01/08/2015	Telephone: 301-415-7169
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 03/09/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 06/22/2015
	Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/07/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/08/2014	Telephone: 202-343-9775
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 02/27/2015
Number of Days to Update: 12	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/16/2014	Source: EPA
Date Data Arrived at EDR: 09/10/2014	Telephone: (212) 637-3000
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 03/09/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/22/2015
	Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2014
Date Data Arrived at EDR: 08/12/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/24/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Biennially

HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003
Date Data Arrived at EDR: 10/20/2006
Date Made Active in Reports: 11/30/2006
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-9564
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: No Update Planned

UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 12/05/2014
Date Data Arrived at EDR: 12/09/2014
Date Made Active in Reports: 01/12/2015
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8056
Last EDR Contact: 03/11/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2015
Date Data Arrived at EDR: 02/04/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 23

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/04/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Annually

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 01/12/2015
Date Data Arrived at EDR: 01/13/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 16

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 03/30/2015
Data Release Frequency: Varies

SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 11/06/2014
Date Data Arrived at EDR: 11/07/2014
Date Made Active in Reports: 11/25/2014
Number of Days to Update: 18

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: No Update Planned

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 12/03/2014
Date Data Arrived at EDR: 12/23/2014
Date Made Active in Reports: 02/04/2015
Number of Days to Update: 43

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Annually

E DESIGNATION: E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 12/03/2014
Date Data Arrived at EDR: 12/24/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 36

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 12/22/2014
Next Scheduled EDR Contact: 04/06/2015
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/05/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

FEDLAND: Federal and Indian Lands

Federally and Indian administered lands of the United States. Lands included are administered by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 02/06/2015
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 02/06/2015
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/09/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 20

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 01/05/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 11/19/2014
Date Data Arrived at EDR: 11/21/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/01/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 23

Source: Department of Environmental Conservation
Telephone: 518-402-8712
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 01/06/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 21

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 01/05/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

CORTLAND COUNTY:

Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 02/18/2015	Source: Cortland County Health Department
Date Data Arrived at EDR: 02/24/2015	Telephone: 607-753-5035
Date Made Active in Reports: 03/06/2015	Last EDR Contact: 02/02/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 05/18/2015
	Data Release Frequency: Quarterly

Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 02/18/2015	Source: Cortland County Health Department
Date Data Arrived at EDR: 02/24/2015	Telephone: 607-753-5035
Date Made Active in Reports: 03/06/2015	Last EDR Contact: 02/02/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 05/18/2015
	Data Release Frequency: Quarterly

NASSAU COUNTY:

Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 11/20/2013	Source: Nassau County Health Department
Date Data Arrived at EDR: 11/22/2013	Telephone: 516-571-3314
Date Made Active in Reports: 02/11/2014	Last EDR Contact: 02/05/2015
Number of Days to Update: 81	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: No Update Planned

Storage Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011	Source: Nassau County Office of the Fire Marshal
Date Data Arrived at EDR: 02/23/2011	Telephone: 516-572-1000
Date Made Active in Reports: 03/29/2011	Last EDR Contact: 02/02/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/18/2015
	Data Release Frequency: Varies

Registered Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 11/20/2013	Source: Nassau County Health Department
Date Data Arrived at EDR: 11/22/2013	Telephone: 516-571-3314
Date Made Active in Reports: 02/11/2014	Last EDR Contact: 02/05/2015
Number of Days to Update: 81	Next Scheduled EDR Contact: 04/20/2015
	Data Release Frequency: No Update Planned

Storage Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011	Source: Nassau County Office of the Fire Marshal
Date Data Arrived at EDR: 02/23/2011	Telephone: 516-572-1000
Date Made Active in Reports: 03/29/2011	Last EDR Contact: 02/02/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/18/2015
	Data Release Frequency: Varies

ROCKLAND COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County.

Date of Government Version: 12/15/2014
Date Data Arrived at EDR: 12/18/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 26

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County.

Date of Government Version: 12/15/2014
Date Data Arrived at EDR: 12/18/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 26

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

SUFFOLK COUNTY:

Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 01/30/2014
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/03/2014
Number of Days to Update: 34

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 11/03/2014
Next Scheduled EDR Contact: 02/16/2015
Data Release Frequency: No Update Planned

Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 01/30/2014
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/03/2014
Number of Days to Update: 34

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 11/03/2014
Next Scheduled EDR Contact: 02/16/2015
Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 12/11/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 32

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Varies

Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 12/11/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 32

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/17/2014
Next Scheduled EDR Contact: 03/02/2015
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/12/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/21/2014
Date Made Active in Reports: 08/25/2014
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/19/2015
Next Scheduled EDR Contact: 05/04/2015
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/15/2014
Date Made Active in Reports: 08/13/2014
Number of Days to Update: 29

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/22/2014
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 21

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 01/19/2015
Next Scheduled EDR Contact: 05/04/2015
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/20/2014
Date Made Active in Reports: 08/07/2014
Number of Days to Update: 48

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers

Source: Department of Health

Telephone: 212-676-2444

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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APPENDIX D
GEOLOGIC BORING LOGS / TEMPORARY WELL CONSTRUCTION
DETAILS



LiRo Engineers, Inc.

TEST BORING LOG

BORING NO: SB-01						
PROJECT: HBPED800Q Porpoise Pedestrian Bridge, Flushing Meadows/Corona Park, Queens, NY						
SHEET: 1 of 1						
CLIENT: New York City Department of Design and Construction (NYCDDC)						
JOB NO.: 15-008-0265-03						
BORING CONTRACTOR: ADT, Inc.						
LOCATION: NW side of the bridge						
GROUNDWATER: 6.0'						
GROUND ELEVATION:						
DATE	TIME	LEVEL	TYPE	TYPE	CAS.	SAMPLER
						Macro core
				DIA.		5'
				WT.		
				FALL		
DATE STARTED: April 17, 2015						
DATE FINISHED: April 17, 2015						
DRILLER: Andrea Larkin						
GEOLOGIST: Eva Jakubowska						
REVIEWED BY: Steve Frank						

DEPTH FEET	SAMPLE					DESCRIPTION			USCS	REMARKS
	STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% RQD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION		
6		SB-01			NA	Dark brown	NA	0-6.0': Fine to medium sand with fill material.	FILL	Hand cleared to 6 ft bgs PID: 0.0 ppm WET at 6.0 ft.
10					100%	Black	Medium dense	6.0-10.0': Fine to medium sand with ash and fill material.		PID: 0.0 ppm WET
15					40%	Black	Medium dense	10.0-15.0': Fine to medium sand with traces of clay and fill material.		PID: 0.0 ppm WET
20					30%	Black	Medium dense	15.0-17.0': Peat (organic material). 17.0-20.0': Fine sand with muddy clay.	PT SC	PID: 0.0 ppm WET

Terminated at 20 ft BGS

COMMENTS:	PROJECT NO.: 15-008-0265-03
Soil samples were classified in the field using the Unified Soil Classification System (USCS).	BORING NO.: SB-01
Groundwater was noted at 6 ft bgs. The boring was driven to a depth of 20 ft bgs.	
Two (2) soil samples were collected and sent for lab analysis: a grab sample (SB-01-5.5-6.0), at 6" interval above the groundwater table; and, a composite sample (SB-01-COMP) of the entire boring. Additionally, the soil from this boring was part of the WC-01 sample.	



LiRo Engineers, Inc.

TEST BORING LOG

PROJECT: HBPED800Q Porpoise Pedestrian Bridge, Flushing Meadows/Corona Park, Queens, NY					BORING NO.: SB-02				
CLIENT: New York City Department of Design and Construction (NYCDDC)					SHEET: 1 of 1				
BORING CONTRACTOR: ADT, Inc.					JOB NO.: 15-008-0265-03				
GROUNDWATER: 4.0'					LOCATION: NS side of the bridge				
DATE					GROUND ELEVATION:				
TIME					DATE STARTED: April 17, 2015				
LEVEL					DATE FINISHED: April 17, 2015				
TYPE					DRILLER: Andrea Larkin				
TYPE					GEOLOGIST: Eva Jakubowska				
DIA.					REVIEWED BY: Steve Frank				
WT.									
FALL									

DEPTH FEET	SAMPLE					DESCRIPTION				USCS	REMARKS
	STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% ROD%	CAS. COLOR	SAMPLER HARDNESS	TUBE MATERIAL DESCRIPTION			
6		SB-02			NA	Dark brown	NA	0-6.0': Fine to medium sand with fill material.	FILL	Hand cleared to 6 ft bgs PID: 0.0 ppm WET at 4 ft.	
10					50%	Dark brown to black	Medium dense	6.0-8.0': Fine sand with fill material and ash. 8.0-10.0': Peat (organic material).		PT	PID: 0.0 ppm WET
15					100%	Black to grey	Soft	10.0-13.0': Peat (organic material). 13.0-15.0': Clay.	CH		PID: 0.0 ppm WET
20					100%	Dark grey	Soft	15.0-20.0': Clay with some small rocks.	CL	PID: 0.0 ppm WET	

Terminated at 20 ft BGS

COMMENTS:					PROJECT NO.: 15-008-0265-03				
Soil samples were classified in the field using the Unified Soil Classification System (USCS).					BORING NO.: SB-01				
Groundwater was noted at 4 ft bgs. The boring was driven to a depth of 20 ft bgs.									
Two (2) soil samples were collected and sent for lab analysis: a grab sample (SB-02-3.5-4.0),									
at 6" interval above the groundwater table; and, a composite sample (SB-02-COMP) of the entire									
boring. Additionally, the soil from this boring was part of the WC-01 sample.									
TWP-02 was installed at this location and a groundwater sample was collected.									



LiRo Engineers, Inc.

TEST BORING LOG

BORING NO: SB-03

PROJECT: HBPED800Q Porpoise Pedestrian Bridge, Flushing Meadows/Corona Park, Queens, NY

SHEET: 1 of 1

CLIENT: New York City Department of Design and Construction (NYCDDC)

JOB NO.: 15-008-0265-03

BORING CONTRACTOR: ADT, Inc.

LOCATION: NE side of the bridge

GROUNDWATER: 5.0'

GROUND ELEVATION:

DATE	TIME	LEVEL	TYPE	TYPE	CAS.	SAMPLER	TUBE	DATE STARTED:	DATE FINISHED:	DRILLER:	GEOLOGIST:	REVIEWED BY:
				DIA.		Macro core	5'	April 17, 2015	April 17, 2015	Andrea Larkin	Eva Jakubowska	Steve Frank
				WT.								
				FALL								

DEPTH FEET	SAMPLE					DESCRIPTION			USCS	REMARKS
	STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION		
0-6		SB-03			NA	Dark brown	NA	0-6.0': Medium sand with rocks, tree roots, and fill material.	FILL	Hand cleared to 6 ft bgs PID: 0.0 ppm WET at 5.0 ft.
6-10					70%	Brown to light brown	Medium dense	6.0-10.0': Fine to medium sand with fill material.		PID: 0.0 ppm WET
10-15					100%	Black to brown	Soft	10.0-11.0': Peat (organic material). 11.0-15.0': Fine sand and muddy clay.	PT SC	PID: 0.0 ppm Saturated
15-20					NA	NA	NA	15.0-20.0': NO RECOVERY	NA	NA

Terminated at 20 ft BGS

COMMENTS:

Soil samples were classified in the field using the Unified Soil Classification System (USCS).
 Groundwater was noted at 5 ft bgs. The boring was driven to a depth of 20 ft bgs.
 Two (2) soil samples were collected and sent for lab analysis: a grab sample (SB-03-4.5-5.0),
 at 6" interval above the groundwater table; and, a composite sample (SB-03-COMP) of the entire
 boring. Additionally, the soil from this boring was part of the WC-01 sample.

PROJECT NO.: 15-008-0265-03
BORING NO.: SB-03



LiRo Engineers, Inc.

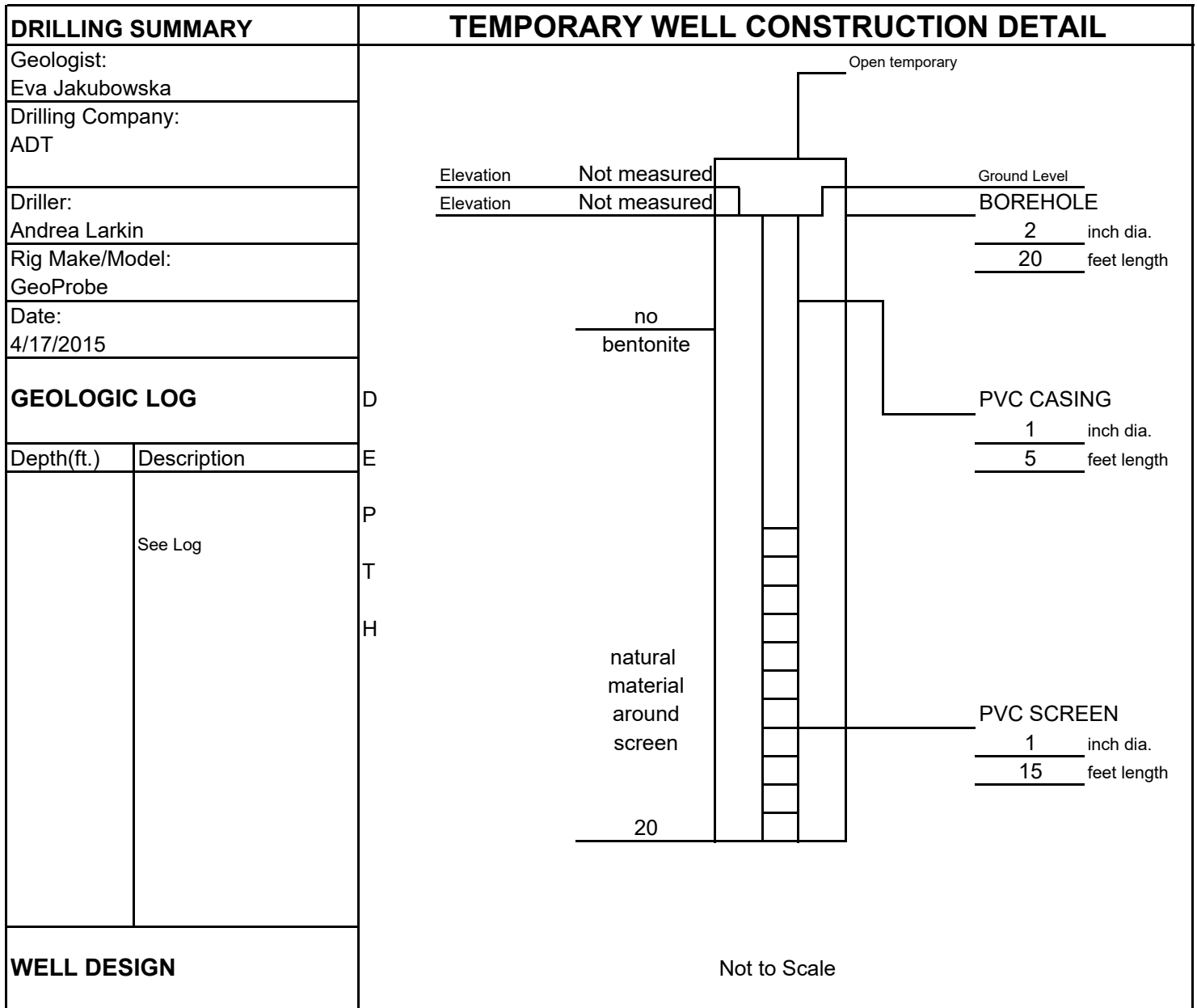
TEST BORING LOG

PROJECT: HBPED800Q Porpoise Pedestrian Bridge, Flushing Meadows/Corona Park, Queens, NY							BORING NO.: SB-04	
CLIENT: New York City Department of Design and Construction (NYCDDC)							SHEET: 1 of 1	
BORING CONTRACTOR: ADT, Inc.							JOB NO.: 15-008-0265-03	
GROUNDWATER: 5.0'							LOCATION: NS side of the bridge	
DATE							GROUND ELEVATION:	
TIME							DATE STARTED: April 17, 2015	
LEVEL							DATE FINISHED: April 17, 2015	
TYPE							DRILLER: Andrea Larkin	
TYPE							GEOLOGIST: Eva Jakubowska	
CAS.							REVIEWED BY: Steve Frank	
SAMPLER								
TUBE								

DEPTH FEET	SAMPLE					DESCRIPTION			USCS	REMARKS
	STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% RQD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION		
6		SB-04			NA	Dark brown	NA	0-6.0': Fine to medium sand with some roots, small rocks, and fill material.	FILL	Hand cleared to 6 ft bgs PID: 0.0 ppm WET at 5 ft.
10					10%	Brown to black	Soft	6.0-10.0': Very little recovery. Fine sand with traces of clay.		PID: 0.0 ppm WET
15					60%	Greyish to black	Medium dense	10.0-13.0': Fine sand with clay and fill material. 13.0-14.0': Fine sand with traces of silt and fill material. 14.0-15.0': Peat (organic material).		PT
20					10%	Black	Medium dense	15.0-16.0': Peat (organic material). 16.0-20.0': The rest: muddy clay. Very little recovery.	MH / ML	PID: 0.0 ppm Saturated

Terminated at 20 ft BGS

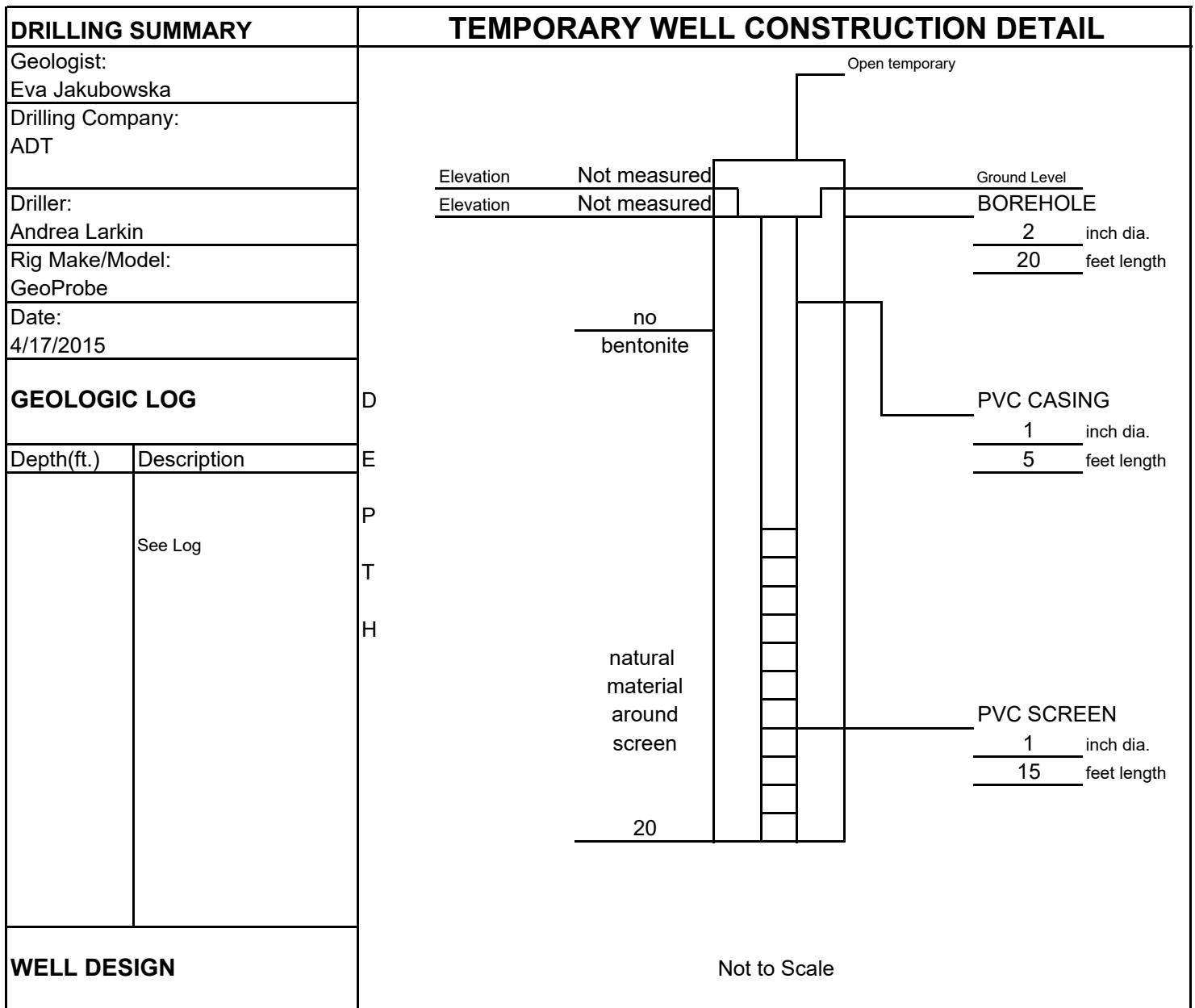
COMMENTS:	Soil samples were classified in the field using the Unified Soil Classification System (USCS).	PROJECT NO.: 15-008-0265-03
	Groundwater was noted at 5 ft bgs. The boring was driven to a depth of 20 ft bgs.	BORING NO.: SB-04
	Two (2) soil samples were collected and sent for lab analysis: a grab sample (SB-04-4.5-5.0),	
	at 6" interval above the groundwater table; and, a composite sample (SB-04-COMP) of the entire boring. Additionally, the soil from this boring was part of the WC-01 sample.	
	TWP-04 was installed at this location and a groundwater sample was collected.	



CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: None	Type: 1" PVC	Type: no filter pack Setting: N/A
Monitor: None	Slot Size: 0.010"	SEAL MATERIAL
		Type: Bentonite Setting: none Type: Cement Setting: NA

COMMENTS:
 Temporary well.
 Groundwater noted at approximately 4 ft bgs.

Client: NYCDDC- BEGS	Location: Flushing Meadows/Corona Park, Queens, NY	Project No.: 15-008-0265-03
LiRo Engineers, Inc.	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SB-02/TWP-02



CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: None	Type: 1" PVC	Type: no filter pack Setting: N/A
Monitor: None	Slot Size: 0.010"	SEAL MATERIAL Type: Bentonite Setting: none Type: Cement Setting: NA

COMMENTS:
 Temporary well.
 Groundwater noted at approximately 5 ft bgs.

Client: NYCDDC- BEGS	Location: Flushing Meadows/Corona Park, Queens, NY	Project No.: 15-008-0265-03
LiRo Engineers, Inc.	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SB-04/TWP-04



APPENDIX E
LABORATORY ANALYTICAL RESULTS

Included on Attached CD

May 8, 2015

Steve Frank
LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, NY 14209-2202

Project Location: Porpoise Pedestrian Bridge, Queens, NY
Client Job Number:
Project Number: 15-008-0265
Laboratory Work Order Number: 15D0889

Enclosed are results of analyses for samples received by the laboratory on April 17, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



James M. Georgantas
Project Manager

Table of Contents

Sample Summary	5
Case Narrative	8
Sample Results	13
15D0889-01	13
15D0889-02	16
15D0889-03	23
15D0889-04	26
15D0889-05	33
15D0889-06	36
15D0889-07	43
15D0889-08	46
15D0889-09	53
15D0889-10	61
15D0889-11	66
Sample Preparation Information	71
QC Data	76
Volatile Organic Compounds by GC/MS	76
B119989	76
Volatile Organic Compounds by GC/MS	81
B119971	81
Semivolatile Organic Compounds by GC/MS	83
B119938	83
Organochloride Pesticides by GC/ECD	88
B119880	88
Polychlorinated Biphenyls By GC/ECD	91
B119881	91

Table of Contents (continued)

B120042	92
Herbicides by GC/ECD	93
B119785	93
Petroleum Hydrocarbons Analyses	95
B119724	95
B119936	95
Metals Analyses (Total)	96
B119808	96
B119915	96
B119951	96
B120002	98
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)	99
B119641	99
B119662	99
B119663	99
B119709	99
B119811	99
B119852	100
B119853	100
B119877	100
B119900	100
B119917	101
B119996	101
B120016	101
B120041	101

Table of Contents (continued)

B120132	101
TCLP - Volatile Organic Compounds by GC/MS	103
B119952	103
TCLP - Semivolatile Organic Compounds by GC/MS	104
B120157	104
TCLP - Organochloride Pesticides by GC/ECD	106
B120154	106
TCLP - Polychlorinated Biphenyls By GC/ECD	107
B120156	107
TCLP - Herbicides by GC/ECD	108
B120043	108
TCLP - Metals Analyses	109
B120059	109
B120088	109
Pesticides Degradation Report	110
Dual Column RPD Report	115
Flag/Qualifier Summary	131
Certifications	132
Chain of Custody/Sample Receipt	145

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

LiRo Engineers, Inc.
 690 Delaware Avenue
 Buffalo, NY 14209-2202
 ATTN: Steve Frank

REPORT DATE: 5/8/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 15-008-0265

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15D0889

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Porpoise Pedestrian Bridge, Queens, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SB-01-5.5-6.0'	15D0889-01	Soil		SM 2540G SW-846 8260C	
SB-01-COMP	15D0889-02	Soil		SM 2540G SW-846 6010C SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8151A SW-846 8270D	
SB-02-3.5-4.0'	15D0889-03	Soil		SM 2540G SW-846 8260C	
SB-02-COMP	15D0889-04	Soil		SM 2540G SW-846 6010C SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8151A SW-846 8270D	
SB-03-4.5-5.0'	15D0889-05	Soil		SM 2540G SW-846 8260C	
SB-03-COMP	15D0889-06	Soil		SM 2540G SW-846 6010C SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8151A SW-846 8270D	
SB-04-4.5-5.0'	15D0889-07	Soil		SM 2540G SW-846 8260C	
SB-04-COMP	15D0889-08	Soil		SM 2540G SW-846 6010C SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8151A SW-846 8270D	

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LiRo Engineers, Inc.
 690 Delaware Avenue
 Buffalo, NY 14209-2202
 ATTN: Steve Frank

REPORT DATE: 5/8/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 15-008-0265

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15D0889

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Porpoise Pedestrian Bridge, Queens, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
WC-01	15D0889-09	Soil	SB-01 Through SB-04	SM 2540G	
				SW-846 1030	
				SW-846 1311	
				SW-846 6010C	
				SW-846 7470A	
				SW-846 8015C	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8151A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
				SW-846 9095B	
TWP-02	15D0889-10	Ground Water		EPA 1664B	
				EPA 420.1	
				EPA 608	
				EPA 624	
				SM 21-22 4500 NO3 F	
				SM19-22 4500-N Org	
				B,C-NH3 C	
				SM21-22 2540B	
				SM21-22 2540D	
				SM21-22 4500 CL B	
				SM21-22 4500 H B	
				SM21-22 5210B	MA M-CT007/CT PH-0618/NY11301
				SW-846 1010	
				SW-846 6010C	
				SW-846 7196A	
SW-846 7470A					

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, NY 14209-2202
ATTN: Steve Frank

REPORT DATE: 5/8/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 15-008-0265

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15D0889

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Porpoise Pedestrian Bridge, Queens, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TWP-04	15D0889-11	Ground Water		EPA 1664B EPA 420.1 EPA 608 EPA 624 SM 21-22 4500 NO3 F SM19-22 4500-N Org B,C-NH3 C SM21-22 2540B SM21-22 2540D SM21-22 4500 CL B SM21-22 4500 H B SM21-22 5210B SW-846 1010 SW-846 6010C SW-846 7196A SW-846 7470A	MAM-CT007/CT PH-0618/NY11301

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.
REVISED REPORT 05/08/15 - VOC, cis-1,2-dichloroethylene, Naphthalene, and 1,2,4 Trichlorobenzene reported.

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EPA 624

Qualifications:**DL-01**

Elevated reporting limits for all volatile compounds due to foaming sample matrix.

Analyte & Samples(s) Qualified:

15D0889-10[TWP-02], 15D0889-11[TWP-04]

L-03

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2,4-Trichlorobenzene**

15D0889-10[TWP-02], 15D0889-11[TWP-04], B119971-BLK1, B119971-BS1

Naphthalene

15D0889-10[TWP-02], 15D0889-11[TWP-04], B119971-BLK1, B119971-BS1

SM21-22 4500 H B

Qualifications:**H-05**

Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.

Analyte & Samples(s) Qualified:**pH**

15D0889-10[TWP-02], 15D0889-11[TWP-04]

SW-846 6010C

Qualifications:**B**

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:**Copper**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119951-BLK1, B119951-BS1, B119951-BSD1

Zinc

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119951-BLK1, B119951-BS1, B119951-BSD1

B-07

Data is not affected by elevated level in blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:**Copper**

15D0889-02[SB-01-COMP], 15D0889-08[SB-04-COMP]

Zinc

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP]

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**Selenium**

B120088-BSD1

L-10

The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be bias on the high side.

Analyte & Samples(s) Qualified:**Lead**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119951-MRL1

MS-11

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**Selenium**

15D0889-09[WC-01], B120088-MS1

SW-846 7196A**Qualifications:****MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:**Hexavalent Chromium**

15D0889-11[TWP-04], B119641-MS1, B119641-MSD1

SW-846 8015C**Qualifications:****PR-03**

Sample preserved in the laboratory, not in the field as required by the method.

Analyte & Samples(s) Qualified:

15D0889-09[WC-01]

SW-846 8151A**Qualifications:****S-12**

Surrogate recovery is outside of control limits on confirmatory column, but within control limits on primary column. Data validation is not affected.

Analyte & Samples(s) Qualified:**2,4-Dichlorophenylacetic acid [2C]**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP]

SW-846 8260C**Qualifications:****L-07**

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**Acetone**

B119989-BSD1

Naphthalene

B119989-BS1

PR-03

Sample preserved in the laboratory, not in the field as required by the method.

Analyte & Samples(s) Qualified:

15D0889-01[SB-01-5.5-6.0'], 15D0889-03[SB-02-3.5-4.0'], 15D0889-05[SB-03-4.5-5.0'], 15D0889-07[SB-04-4.5-5.0']

PR-15

According to the NY ELAP program, all voa results less than 0.2mg/Kg are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.

Analyte & Samples(s) Qualified:

15D0889-01[SB-01-5.5-6.0'], 15D0889-03[SB-02-3.5-4.0'], 15D0889-05[SB-03-4.5-5.0'], 15D0889-07[SB-04-4.5-5.0']

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**Bromomethane**

15D0889-01[SB-01-5.5-6.0'], 15D0889-03[SB-02-3.5-4.0'], 15D0889-05[SB-03-4.5-5.0'], 15D0889-07[SB-04-4.5-5.0'], B119989-BLK1, B119989-BS1, B119989-BSD1

tert-Butyl Alcohol (TBA)

15D0889-01[SB-01-5.5-6.0'], 15D0889-03[SB-02-3.5-4.0'], 15D0889-05[SB-03-4.5-5.0'], 15D0889-07[SB-04-4.5-5.0'], B119989-BLK1, B119989-BS1, B119989-BSD1

V-20

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Bromomethane**

B119989-BS1, B119989-BSD1

SW-846 8270D**Qualifications:****L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

Benzoic Acid

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**4-Chloroaniline**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

Aniline

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

Benzidine

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Benzidine**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

Hexachlorocyclopentadiene

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Benzo(g,h,i)perylene**

15D0889-08[SB-04-COMP]

Dibenz(a,h)anthracene

15D0889-08[SB-04-COMP]

Pyrene

15D0889-02RE1[SB-01-COMP], 15D0889-08[SB-04-COMP]

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:**Pentachloronitrobenzene**

15D0889-02[SB-01-COMP], 15D0889-04[SB-02-COMP], 15D0889-06[SB-03-COMP], 15D0889-08[SB-04-COMP], B119938-BLK1, B119938-BS1, B119938-BSD1

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SW-846 8015C

Gasoline Range Organics (2-Methylpentane through 1,2,4-Trimethylbenzene) is quantitated against a calibration made with an unleaded gasoline composite standard.
Diesel Range Organics (C10-C28) is quantitated against a calibration made with a #2 fuel oil standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Daren J. Damboragian", is written over a light gray rectangular background.

Daren J. Damboragian
Laboratory Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-5.5-6.0'

Sampled: 4/17/2015 11:35

Sample ID: 15D0889-01

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Acrylonitrile	ND	0.0061	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Benzene	0.014	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Bromomethane	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 22:25	MFF
2-Butanone (MEK)	ND	0.041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
tert-Butyl Alcohol (TBA)	ND	0.041	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 22:25	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Carbon Disulfide	ND	0.010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Chloroform	ND	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
trans-1,4-Dichloro-2-butene	ND	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1-Dichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-5.5-6.0'

Sampled: 4/17/2015 11:35

Sample ID: 15D0889-01

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,4-Dioxane	ND	0.10	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Methylene Chloride	0.027	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Naphthalene	ND	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1,1-Trichloroethane	ND	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
m+p Xylene	0.0051	0.0041	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:25	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.0	70-130	4/22/15 22:25
Toluene-d8	94.3	70-130	4/22/15 22:25
4-Bromofluorobenzene	92.8	70-130	4/22/15 22:25

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-5.5-6.0'

Sampled: 4/17/2015 11:35

Sample ID: 15D0889-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.0		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Acetophenone	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Aniline	ND	0.42	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Anthracene	0.57	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzidine	ND	0.81	mg/Kg dry	1	R-05, V-05	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzo(a)anthracene	2.4	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzo(a)pyrene	2.4	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzo(b)fluoranthene	3.1	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzo(g,h,i)perylene	1.7	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzo(k)fluoranthene	1.1	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Benzoic Acid	ND	1.2	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Bis(2-chloroethoxy)methane	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Bis(2-chloroethyl)ether	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Bis(2-chloroisopropyl)ether	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Bis(2-Ethylhexyl)phthalate	0.43	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4-Bromophenylphenylether	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Butylbenzylphthalate	1.3	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Carbazole	0.21	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4-Chloroaniline	ND	0.81	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4-Chloro-3-methylphenol	ND	0.81	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2-Chloronaphthalene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2-Chlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4-Chlorophenylphenylether	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Chrysene	2.5	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Dibenz(a,h)anthracene	0.44	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Dibenzofuran	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Di-n-butylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1,2-Dichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1,3-Dichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1,4-Dichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
3,3-Dichlorobenzidine	ND	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,4-Dichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Diethylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,4-Dimethylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Dimethylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4,6-Dinitro-2-methylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,4-Dinitrophenol	ND	0.81	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,4-Dinitrotoluene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,6-Dinitrotoluene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Di-n-octylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Fluoranthene	4.2	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Hexachlorobutadiene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Hexachlorocyclopentadiene	ND	0.42	mg/Kg dry	1	V-05	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Hexachloroethane	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Indeno(1,2,3-cd)pyrene	1.7	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Isophorone	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2-Methylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
3/4-Methylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Naphthalene	0.51	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2-Nitroaniline	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
3-Nitroaniline	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4-Nitroaniline	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Nitrobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2-Nitrophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
4-Nitrophenol	ND	0.81	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
N-Nitrosodimethylamine	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
N-Nitrosodiphenylamine	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
N-Nitrosodi-n-propylamine	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Pentachloronitrobenzene	ND	0.42	mg/Kg dry	1	V-16	SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Pentachlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Phenanthrene	2.8	0.21	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Phenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
Pyrene	4.3	0.42	mg/Kg dry	2	V-06	SW-846 8270D	4/22/15	4/24/15 10:22	BGL
Pyridine	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
1,2,4-Trichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,4,5-Trichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL
2,4,6-Trichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:13	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	61.8	30-130	4/23/15 22:13
Phenol-d6	71.8	30-130	4/23/15 22:13
Nitrobenzene-d5	65.6	30-130	4/23/15 22:13
2-Fluorobiphenyl	78.5	30-130	4/23/15 22:13
2,4,6-Tribromophenol	80.9	30-130	4/23/15 22:13
p-Terphenyl-d14	114	30-130	4/23/15 22:13

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.024	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Aldrin [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
alpha-BHC [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
beta-BHC [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
delta-BHC [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
gamma-BHC (Lindane) [1]	ND	0.0024	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Chlordane [1]	ND	0.024	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
4,4'-DDD [2]	0.0055	0.0048	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
4,4'-DDE [1]	0.0074	0.0048	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
4,4'-DDT [2]	0.0067	0.0048	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Dieldrin [1]	ND	0.0048	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Endosulfan I [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Endosulfan II [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Endosulfan sulfate [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Endrin [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Endrin aldehyde [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:14	PJG
Endrin ketone [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Heptachlor [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Heptachlor epoxide [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Hexachlorobenzene [1]	ND	0.0071	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Methoxychlor [1]	ND	0.059	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Toxaphene [1]	ND	0.12	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 12:59	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		56.5	30-150					4/25/15 12:59	
Decachlorobiphenyl [2]		68.7	30-150					4/25/15 12:59	
Tetrachloro-m-xylene [1]		63.6	30-150					4/25/15 12:59	
Tetrachloro-m-xylene [2]		58.9	30-150					4/25/15 12:59	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:06	PJG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		61.6	30-150					4/25/15 11:06	
Decachlorobiphenyl [2]		62.8	30-150					4/25/15 11:06	
Tetrachloro-m-xylene [1]		67.6	30-150					4/25/15 11:06	
Tetrachloro-m-xylene [2]		62.8	30-150					4/25/15 11:06	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	31	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
2,4-DB [1]	ND	31	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
2,4,5-TP (Silvex) [1]	ND	3.1	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
2,4,5-T [1]	ND	3.1	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
Dalapon [1]	ND	77	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
Dicamba [1]	ND	3.1	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
Dichloroprop [1]	ND	31	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
Dinoseb [1]	ND	15	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
MCPA [1]	ND	3100	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
MCPA [1]	ND	3100	µg/kg dry	1		SW-846 8151A	4/21/15	4/24/15 16:46	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]	89.6		30-150					4/24/15 16:46	
2,4-Dichlorophenylacetic acid [2]	161 *		30-150		S-12			4/24/15 16:46	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	5900	3.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Antimony	6.4	3.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Arsenic	15	3.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Barium	700	3.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Beryllium	0.60	0.32	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Cadmium	3.0	0.32	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Calcium	11000	9.6	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Chromium	30	0.64	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Cobalt	7.2	3.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Copper	790	0.64	mg/Kg dry	1	B, B-07	SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Iron	37000	32	mg/Kg dry	10		SW-846 6010C	4/22/15	4/27/15 13:25	MJH
Lead	1400	0.96	mg/Kg dry	1	L-10	SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Magnesium	2700	9.6	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Manganese	350	0.64	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Mercury	1.8	0.31	mg/Kg dry	10		SW-846 7471B	4/22/15	4/24/15 15:04	SCB
Nickel	25	0.64	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Potassium	770	130	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Selenium	ND	6.4	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Silver	1.3	0.64	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Sodium	260	130	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Thallium	ND	3.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Vanadium	26	1.3	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:44	MJH
Zinc	1200	1.3	mg/Kg dry	1	B-07, B	SW-846 6010C	4/22/15	4/23/15 21:44	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-01-COMP

Sampled: 4/17/2015 11:40

Sample ID: 15D0889-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	80.9		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-3.5-4.0'

Sampled: 4/17/2015 13:30

Sample ID: 15D0889-03

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Acrylonitrile	ND	0.0070	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Bromochloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Bromoform	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 22:56	MFF
2-Butanone (MEK)	ND	0.047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
tert-Butyl Alcohol (TBA)	ND	0.047	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 22:56	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Carbon Disulfide	ND	0.012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Chloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Chloroform	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
trans-1,4-Dichloro-2-butene	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1-Dichloroethylene	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
trans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Diethyl Ether	ND	0.023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-3.5-4.0'

Sampled: 4/17/2015 13:30

Sample ID: 15D0889-03

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Methylene Chloride	0.057	0.023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Naphthalene	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
n-Propylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,3,5-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1,1-Trichloroethane	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
m+p Xylene	ND	0.0047	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 22:56	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.5	70-130	4/22/15 22:56
Toluene-d8	96.0	70-130	4/22/15 22:56
4-Bromofluorobenzene	93.8	70-130	4/22/15 22:56

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-3.5-4.0'

Sampled: 4/17/2015 13:30

Sample ID: 15D0889-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.3		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Acetophenone	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Aniline	ND	0.63	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzidine	ND	1.2	mg/Kg dry	1	R-05, V-05	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzo(a)anthracene	0.33	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzo(a)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzo(b)fluoranthene	0.38	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Benzoic Acid	ND	1.9	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Bis(2-chloroethoxy)methane	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Bis(2-chloroethyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Bis(2-chloroisopropyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4-Bromophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Butylbenzylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Carbazole	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4-Chloroaniline	ND	1.2	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2-Chloronaphthalene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2-Chlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4-Chlorophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Chrysene	0.33	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Dibenzofuran	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Di-n-butylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1,2-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1,3-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1,4-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
3,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,4-Dichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Diethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,4-Dimethylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Dimethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4,6-Dinitro-2-methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,4-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,6-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Di-n-octylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Fluoranthene	0.61	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Fluorene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Hexachlorobutadiene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Hexachlorocyclopentadiene	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Hexachloroethane	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Isophorone	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
3/4-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Naphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
3-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Nitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2-Nitrophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
N-Nitrosodimethylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
N-Nitrosodiphenylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
N-Nitrosodi-n-propylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Pentachloronitrobenzene	ND	0.63	mg/Kg dry	1	V-16	SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Pentachlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Phenanthrene	0.66	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Phenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Pyrene	0.77	0.32	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
Pyridine	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
1,2,4-Trichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,4,5-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL
2,4,6-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:36	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	67.0	30-130	4/23/15 22:36
Phenol-d6	72.4	30-130	4/23/15 22:36
Nitrobenzene-d5	71.5	30-130	4/23/15 22:36
2-Fluorobiphenyl	74.0	30-130	4/23/15 22:36
2,4,6-Tribromophenol	76.5	30-130	4/23/15 22:36
p-Terphenyl-d14	99.9	30-130	4/23/15 22:36

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.036	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Aldrin [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
alpha-BHC [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
beta-BHC [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
delta-BHC [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
gamma-BHC (Lindane) [1]	ND	0.0036	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Chlordane [1]	ND	0.036	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
4,4'-DDD [1]	ND	0.0073	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
4,4'-DDE [1]	ND	0.0073	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
4,4'-DDT [2]	ND	0.0073	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Dieldrin [1]	ND	0.0073	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Endosulfan I [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Endosulfan II [1]	ND	0.015	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Endosulfan sulfate [1]	ND	0.015	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Endrin [1]	ND	0.015	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Endrin aldehyde [1]	ND	0.015	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:37	PJG
Endrin ketone [1]	ND	0.015	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Heptachlor [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Heptachlor epoxide [1]	ND	0.0091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Hexachlorobenzene [1]	ND	0.011	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Methoxychlor [1]	ND	0.091	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Toxaphene [1]	ND	0.18	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:21	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		66.3	30-150					4/25/15 13:21	
Decachlorobiphenyl [2]		69.2	30-150					4/25/15 13:21	
Tetrachloro-m-xylene [1]		76.7	30-150					4/25/15 13:21	
Tetrachloro-m-xylene [2]		68.2	30-150					4/25/15 13:21	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1221 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1232 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1242 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1248 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1254 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1260 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1262 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Aroclor-1268 [1]	ND	0.18	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:19	PJG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		68.6	30-150					4/25/15 11:19	
Decachlorobiphenyl [2]		66.7	30-150					4/25/15 11:19	
Tetrachloro-m-xylene [1]		80.3	30-150					4/25/15 11:19	
Tetrachloro-m-xylene [2]		76.9	30-150					4/25/15 11:19	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	46	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
2,4-DB [1]	ND	46	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
2,4,5-TP (Silvex) [1]	ND	4.6	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
2,4,5-T [1]	ND	4.6	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
Dalapon [1]	ND	120	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
Dicamba [1]	ND	4.6	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
Dichloroprop [1]	ND	46	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
Dinoseb [1]	ND	23	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
MCPA [1]	ND	4600	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
MCPP [1]	ND	4600	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 21:17	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]	82.6		30-150					4/25/15 21:17	
2,4-Dichlorophenylacetic acid [2]	241 *		30-150			S-12		4/25/15 21:17	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	16000	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Antimony	10	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Arsenic	13	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Barium	85	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Beryllium	1.2	0.49	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Cadmium	0.64	0.49	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Calcium	2800	15	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Chromium	36	0.99	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Cobalt	12	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Copper	35	0.99	mg/Kg dry	1	B	SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Iron	39000	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Lead	130	1.5	mg/Kg dry	1	L-10	SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Magnesium	7600	15	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Manganese	810	0.99	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Mercury	0.11	0.045	mg/Kg dry	1		SW-846 7471B	4/22/15	4/24/15 14:40	SCB
Nickel	24	0.99	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Potassium	4600	200	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Selenium	ND	9.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Silver	ND	0.99	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Sodium	5500	200	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Thallium	ND	4.9	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Vanadium	54	2.0	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:48	MJH
Zinc	160	2.0	mg/Kg dry	1	B, B-07	SW-846 6010C	4/22/15	4/23/15 21:48	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-02-COMP

Sampled: 4/17/2015 13:35

Sample ID: 15D0889-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	53.9		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-4.5-5.0'

Sampled: 4/17/2015 10:45

Sample ID: 15D0889-05

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Acrylonitrile	ND	0.0059	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Bromomethane	ND	0.0098	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 23:27	MFF
2-Butanone (MEK)	ND	0.039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
tert-Butyl Alcohol (TBA)	ND	0.039	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 23:27	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Carbon Disulfide	ND	0.0098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Chlorodibromomethane	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Chloroform	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Chloromethane	ND	0.0098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2-Dibromoethane (EDB)	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
trans-1,4-Dichloro-2-butene	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1-Dichloroethylene	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,3-Dichloropropane	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
cis-1,3-Dichloropropene	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
trans-1,3-Dichloropropene	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-4.5-5.0'

Sampled: 4/17/2015 10:45

Sample ID: 15D0889-05

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,4-Dioxane	ND	0.098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Methylene Chloride	0.057	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Naphthalene	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.00098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Tetrahydrofuran	ND	0.0098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1,1-Trichloroethane	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
Vinyl Chloride	ND	0.0098	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
m+p Xylene	ND	0.0039	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:27	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.0	70-130	4/22/15 23:27
Toluene-d8	94.5	70-130	4/22/15 23:27
4-Bromofluorobenzene	94.6	70-130	4/22/15 23:27

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-4.5-5.0'

Sampled: 4/17/2015 10:45

Sample ID: 15D0889-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.1		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Acetophenone	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Aniline	ND	0.38	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzidine	ND	0.74	mg/Kg dry	1	R-05, V-05	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Benzoic Acid	ND	1.1	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Butylbenzylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4-Chloroaniline	ND	0.74	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4-Chloro-3-methylphenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1,2-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1,3-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1,4-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Dimethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Di-n-octylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Hexachlorocyclopentadiene	ND	0.38	mg/Kg dry	1	V-05	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
3-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
4-Nitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
N-Nitrosodimethylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
N-Nitrosodiphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1	V-16	SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	4/22/15	4/23/15 22:59	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	63.2	30-130	4/23/15 22:59
Phenol-d6	67.9	30-130	4/23/15 22:59
Nitrobenzene-d5	65.4	30-130	4/23/15 22:59
2-Fluorobiphenyl	69.9	30-130	4/23/15 22:59
2,4,6-Tribromophenol	73.2	30-130	4/23/15 22:59
p-Terphenyl-d14	94.8	30-130	4/23/15 22:59

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.023	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Aldrin [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
alpha-BHC [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
beta-BHC [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
delta-BHC [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
gamma-BHC (Lindane) [1]	ND	0.0023	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Chlordane [1]	ND	0.023	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
4,4'-DDD [2]	0.024	0.0046	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
4,4'-DDE [2]	0.017	0.0046	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
4,4'-DDT [2]	0.081	0.0046	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Dieldrin [1]	ND	0.0046	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Endosulfan I [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Endosulfan II [1]	ND	0.0093	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Endosulfan sulfate [1]	ND	0.0093	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Endrin [1]	ND	0.0093	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Endrin aldehyde [1]	ND	0.0093	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:00	PJG
Endrin ketone [1]	ND	0.0093	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Heptachlor [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Heptachlor epoxide [1]	ND	0.0058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Hexachlorobenzene [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Methoxychlor [1]	ND	0.058	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Toxaphene [1]	ND	0.12	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 13:44	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		89.9	30-150					4/25/15 13:44	
Decachlorobiphenyl [2]		86.3	30-150					4/25/15 13:44	
Tetrachloro-m-xylene [1]		92.2	30-150					4/25/15 13:44	
Tetrachloro-m-xylene [2]		76.2	30-150					4/25/15 13:44	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:32	PJG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		88.2	30-150					4/25/15 11:32	
Decachlorobiphenyl [2]		83.8	30-150					4/25/15 11:32	
Tetrachloro-m-xylene [1]		93.7	30-150					4/25/15 11:32	
Tetrachloro-m-xylene [2]		87.8	30-150					4/25/15 11:32	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	29	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
2,4-DB [1]	ND	29	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
2,4,5-TP (Silvex) [1]	ND	2.9	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
2,4,5-T [1]	ND	2.9	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
Dalapon [1]	ND	72	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
Dicamba [1]	ND	2.9	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
Dichloroprop [1]	ND	29	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
Dinoseb [1]	ND	14	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
MCPA [1]	ND	2900	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
MCPP [1]	ND	2900	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:07	JMB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2,4-Dichlorophenylacetic acid [1]	90.8	30-150						4/25/15 22:07	
2,4-Dichlorophenylacetic acid [2]	218 *	30-150			S-12			4/25/15 22:07	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	7500	2.8	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Antimony	ND	2.8	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Arsenic	3.6	2.8	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Barium	750	2.8	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Beryllium	0.53	0.28	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Cadmium	ND	0.28	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Calcium	1900	8.5	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Chromium	23	0.57	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Cobalt	9.7	2.8	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Copper	47	0.57	mg/Kg dry	1	B	SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Iron	32000	28	mg/Kg dry	10		SW-846 6010C	4/22/15	4/27/15 13:30	MJH
Lead	140	0.85	mg/Kg dry	1	L-10	SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Magnesium	2200	8.5	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Manganese	410	0.57	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Mercury	0.27	0.028	mg/Kg dry	1		SW-846 7471B	4/22/15	4/24/15 14:41	SCB
Nickel	20	0.57	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Potassium	960	110	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Selenium	ND	5.7	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Silver	ND	0.57	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Sodium	190	110	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Thallium	ND	2.8	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Vanadium	25	1.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:52	MJH
Zinc	600	1.1	mg/Kg dry	1	B, B-07	SW-846 6010C	4/22/15	4/23/15 21:52	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-03-COMP

Sampled: 4/17/2015 10:50

Sample ID: 15D0889-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.1		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-4.5-5.0'

Sampled: 4/17/2015 08:45

Sample ID: 15D0889-07

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Acrylonitrile	ND	0.0065	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 23:58	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
tert-Butyl Alcohol (TBA)	ND	0.043	mg/Kg dry	1	R-05	SW-846 8260C	4/22/15	4/22/15 23:58	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Carbon Disulfide	ND	0.011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Diethyl Ether	ND	0.022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-4.5-5.0'

Sampled: 4/17/2015 08:45

Sample ID: 15D0889-07

Sample Matrix: Soil

Sample Flags: PR-03, PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Methylene Chloride	0.037	0.022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,3,5-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1,1-Trichloroethane	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	4/22/15	4/22/15 23:58	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.1	70-130	4/22/15 23:58
Toluene-d8	96.7	70-130	4/22/15 23:58
4-Bromofluorobenzene	94.0	70-130	4/22/15 23:58

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-4.5-5.0'

Sampled: 4/17/2015 08:45

Sample ID: 15D0889-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.9		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Acenaphthylene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Acetophenone	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Aniline	ND	0.44	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzidine	ND	0.86	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzo(a)anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzo(a)pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzo(b)fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzo(g,h,i)perylene	ND	0.22	mg/Kg dry	1	V-06	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzo(k)fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Benzoic Acid	ND	1.3	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Bis(2-chloroethoxy)methane	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Bis(2-chloroethyl)ether	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Bis(2-chloroisopropyl)ether	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4-Bromophenylphenylether	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Butylbenzylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Carbazole	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4-Chloroaniline	ND	0.86	mg/Kg dry	1	R-05	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4-Chloro-3-methylphenol	ND	0.86	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2-Chloronaphthalene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2-Chlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4-Chlorophenylphenylether	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Chrysene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Dibenz(a,h)anthracene	ND	0.22	mg/Kg dry	1	V-06	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Dibenzofuran	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Di-n-butylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1,2-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1,3-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1,4-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
3,3-Dichlorobenzidine	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,4-Dichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Diethylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,4-Dimethylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Dimethylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4,6-Dinitro-2-methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,4-Dinitrophenol	ND	0.86	mg/Kg dry	1	L-04	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,4-Dinitrotoluene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,6-Dinitrotoluene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Di-n-octylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Fluorene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Hexachlorobutadiene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Hexachlorocyclopentadiene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Hexachloroethane	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Indeno(1,2,3-cd)pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Isophorone	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2-Methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
3/4-Methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Naphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
3-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Nitrobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2-Nitrophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
4-Nitrophenol	ND	0.86	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
N-Nitrosodimethylamine	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
N-Nitrosodiphenylamine	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
N-Nitrosodi-n-propylamine	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Pentachloronitrobenzene	ND	0.44	mg/Kg dry	1	V-16	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Pentachlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Phenanthrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Phenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Pyrene	ND	0.22	mg/Kg dry	1	V-06	SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Pyridine	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
1,2,4-Trichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,4,5-Trichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
2,4,6-Trichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D	4/22/15	4/24/15 9:58	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		60.5	30-130					4/24/15 9:58	
Phenol-d6		63.3	30-130					4/24/15 9:58	
Nitrobenzene-d5		60.2	30-130					4/24/15 9:58	
2-Fluorobiphenyl		59.9	30-130					4/24/15 9:58	
2,4,6-Tribromophenol		65.6	30-130					4/24/15 9:58	
p-Terphenyl-d14		80.2	30-130					4/24/15 9:58	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.026	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Aldrin [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
alpha-BHC [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
beta-BHC [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
delta-BHC [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
gamma-BHC (Lindane) [1]	ND	0.0026	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Chlordane [1]	ND	0.026	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
4,4'-DDD [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
4,4'-DDE [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
4,4'-DDT [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Dieldrin [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Endosulfan I [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Endosulfan II [1]	ND	0.010	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Endosulfan sulfate [1]	ND	0.010	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Endrin [1]	ND	0.010	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Endrin aldehyde [1]	ND	0.010	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 17:04	PJG
Endrin ketone [1]	ND	0.010	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Heptachlor [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Heptachlor epoxide [1]	ND	0.0066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Hexachlorobenzene [1]	ND	0.0079	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Methoxychlor [1]	ND	0.066	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Toxaphene [1]	ND	0.13	mg/Kg dry	1		SW-846 8081B	4/21/15	4/25/15 14:06	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		66.8	30-150					4/25/15 14:06	
Decachlorobiphenyl [2]		67.2	30-150					4/25/15 14:06	
Tetrachloro-m-xylene [1]		70.2	30-150					4/25/15 14:06	
Tetrachloro-m-xylene [2]		62.5	30-150					4/25/15 14:06	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1221 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1232 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1242 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1248 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1254 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1260 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1262 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Aroclor-1268 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/21/15	4/25/15 11:45	PJG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		67.7	30-150					4/25/15 11:45	
Decachlorobiphenyl [2]		65.2	30-150					4/25/15 11:45	
Tetrachloro-m-xylene [1]		74.3	30-150					4/25/15 11:45	
Tetrachloro-m-xylene [2]		69.0	30-150					4/25/15 11:45	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	33	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
2,4-DB [1]	ND	33	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
2,4,5-TP (Silvex) [1]	ND	3.3	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
2,4,5-T [1]	ND	3.3	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
Dalapon [1]	ND	82	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
Dicamba [1]	ND	3.3	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
Dichloroprop [1]	ND	33	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
Dinoseb [1]	ND	16	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
MCPA [1]	ND	3300	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
MCPA [1]	ND	3300	µg/kg dry	1		SW-846 8151A	4/21/15	4/25/15 22:57	JMB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2,4-Dichlorophenylacetic acid [1]	95.3	30-150						4/25/15 22:57	
2,4-Dichlorophenylacetic acid [2]	504 *	30-150			S-12			4/25/15 22:57	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	11000	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Antimony	5.5	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Arsenic	ND	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Barium	300	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Beryllium	0.80	0.31	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Cadmium	0.46	0.31	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Calcium	3200	9.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Chromium	30	0.61	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Cobalt	8.4	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Copper	80	0.61	mg/Kg dry	1	B, B-07	SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Iron	23000	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Lead	190	0.92	mg/Kg dry	1	L-10	SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Magnesium	2800	9.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Manganese	280	0.61	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Mercury	0.44	0.032	mg/Kg dry	1		SW-846 7471B	4/22/15	4/24/15 14:43	SCB
Nickel	17	0.61	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Potassium	1200	120	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Selenium	ND	6.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Silver	ND	0.61	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Sodium	1100	120	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Thallium	ND	3.1	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Vanadium	37	1.2	mg/Kg dry	1		SW-846 6010C	4/22/15	4/23/15 21:57	MJH
Zinc	230	1.2	mg/Kg dry	1	B-07, B	SW-846 6010C	4/22/15	4/23/15 21:57	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: SB-04-COMP

Sampled: 4/17/2015 08:50

Sample ID: 15D0889-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	75.5		% Wt	1		SM 2540G	4/23/15	4/24/15 12:33	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

Sample Flags: PR-03

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Gasoline Range Organics (GRO)	ND	1.4	mg/Kg dry	1		SW-846 8015C	4/20/15	4/21/15 12:43	EEH
Diesel Range Organics	82	49	mg/Kg dry	5		SW-846 8015C	4/22/15	4/24/15 0:23	SCS
Surrogates			% Recovery	Recovery Limits	Flag/Qual				
1-Chloro-3-fluorobenzene			104	70-130				4/21/15 12:43	
o-Terphenyl			90.5	40-140				4/24/15 0:23	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Free Liquid	Absent		present/absent	1		SW-846 9095B	4/20/15	4/20/15 9:30	LL
Ignitability	Absent		present/absent	1		SW-846 1030	4/20/15	4/20/15 20:40	DJM
pH @22.5°C	7.7		pH Units	1		SW-846 9045C	4/18/15	4/18/15 10:05	MMH
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	4/21/15	4/22/15 17:40	DJM
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	4/21/15	4/22/15 15:55	DJM
% Solids	82.8		% Wt	1		SM 2540G	4/22/15	4/22/15 14:28	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

TCLP - Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
2-Butanone (MEK)	ND	0.20	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Carbon Tetrachloride	ND	0.050	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Chlorobenzene	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Chloroform	ND	0.020	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
1,4-Dichlorobenzene	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
1,2-Dichloroethane	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
1,1-Dichloroethylene	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Tetrachloroethylene	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Trichloroethylene	ND	0.010	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Vinyl Chloride	ND	0.020	mg/L	10		SW-846 8260C	4/22/15	4/22/15 13:47	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		117	70-130					4/22/15 13:47	
Toluene-d8		98.9	70-130					4/22/15 13:47	
4-Bromofluorobenzene		92.7	70-130					4/22/15 13:47	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

TCLP - Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-Dinitrotoluene	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Hexachlorobenzene	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Hexachlorobutadiene	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Hexachloroethane	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
2-Methylphenol	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
3/4-Methylphenol	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Nitrobenzene	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Pentachlorophenol	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Pyridine	ND	0.025	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
2,4,5-Trichlorophenol	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
2,4,6-Trichlorophenol	ND	0.050	mg/L	1		SW-846 8270D	4/24/15	4/27/15 10:04	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		72.6	15-110					4/27/15 10:04	
Phenol-d6		64.7	15-110					4/27/15 10:04	
Nitrobenzene-d5		84.7	30-130					4/27/15 10:04	
2-Fluorobiphenyl		84.3	30-130					4/27/15 10:04	
2,4,6-Tribromophenol		93.1	15-110					4/27/15 10:04	
p-Terphenyl-d14		89.4	30-130					4/27/15 10:04	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

TCLP - Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
gamma-BHC (Lindane) [1]	ND	0.030	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Chlordane [1]	ND	0.20	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Endrin [1]	ND	0.080	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Heptachlor [1]	ND	0.050	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Heptachlor epoxide [1]	ND	0.050	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Methoxychlor [1]	ND	0.50	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Toxaphene [1]	ND	1.0	µg/L	1		SW-846 8081B	4/24/15	4/25/15 18:35	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		93.6	30-150					4/25/15 18:35	
Decachlorobiphenyl [2]		88.0	30-150					4/25/15 18:35	
Tetrachloro-m-xylene [1]		86.5	30-150					4/25/15 18:35	
Tetrachloro-m-xylene [2]		78.4	30-150					4/25/15 18:35	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

TCLP - Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/24/15	4/25/15 21:52	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		95.7	30-150					4/25/15 21:52	
Decachlorobiphenyl [2]		91.4	30-150					4/25/15 21:52	
Tetrachloro-m-xylene [1]		86.6	30-150					4/25/15 21:52	
Tetrachloro-m-xylene [2]		88.4	30-150					4/25/15 21:52	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

TCLP - Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	0.050	mg/L	1		SW-846 8151A	4/23/15	4/25/15 18:04	JMB
2,4,5-TP (Silvex) [1]	ND	0.0050	mg/L	1		SW-846 8151A	4/23/15	4/25/15 18:04	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		131	30-150					4/25/15 18:04	
2,4-Dichlorophenylacetic acid [2]		91.6	30-150					4/25/15 18:04	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description: SB-01 Through SB-04

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: WC-01

Sampled: 4/17/2015 14:15

Sample ID: 15D0889-09

Sample Matrix: Soil

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	0.010	mg/L	1		SW-846 6010C	4/23/15	4/25/15 18:35	MJH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/23/15	4/23/15 13:05	SCB
Barium	1.5	0.050	mg/L	1		SW-846 6010C	4/23/15	4/24/15 11:57	MJH
Cadmium	0.015	0.0040	mg/L	1		SW-846 6010C	4/23/15	4/24/15 11:57	MJH
Chromium	0.011	0.010	mg/L	1		SW-846 6010C	4/23/15	4/24/15 11:57	MJH
Lead	3.4	0.010	mg/L	1		SW-846 6010C	4/23/15	4/24/15 11:57	MJH
Selenium	ND	0.050	mg/L	1	MS-11	SW-846 6010C	4/23/15	4/24/15 11:57	MJH
Silver	ND	0.0050	mg/L	1		SW-846 6010C	4/23/15	4/24/15 11:57	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-02

Sampled: 4/17/2015 14:00

Sample ID: 15D0889-10

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	5.0	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Bromodichloromethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Bromoform	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Bromomethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Carbon Tetrachloride	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Chlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Chlorodibromomethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Chloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
2-Chloroethyl Vinyl Ether	ND	50	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Chloroform	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Chloromethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,2-Dichlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,3-Dichlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,4-Dichlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,2-Dichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,1-Dichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,1-Dichloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
trans-1,2-Dichloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,2-Dichloropropane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
cis-1,3-Dichloropropene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
trans-1,3-Dichloropropene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Ethylbenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Methylene Chloride	ND	25	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Naphthalene	ND	10	µg/L	5	L-03	EPA 624	4/22/15	4/23/15 1:21	LBD
1,1,2,2-Tetrachloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Tetrachloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Toluene	ND	5.0	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5	L-03	EPA 624	4/22/15	4/23/15 1:21	LBD
1,1,1-Trichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
1,1,2-Trichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Trichloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
Vinyl Chloride	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
m+p Xylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD
o-Xylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:21	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.1	70-130	4/23/15 1:21
Toluene-d8	102	70-130	4/23/15 1:21
4-Bromofluorobenzene	102	70-130	4/23/15 1:21

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-02

Sampled: 4/17/2015 14:00

Sample ID: 15D0889-10

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/25/15 11:12	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		52.6	30-150					4/25/15 11:12	
Decachlorobiphenyl [2]		50.0	30-150					4/25/15 11:12	
Tetrachloro-m-xylene [1]		105	30-150					4/25/15 11:12	
Tetrachloro-m-xylene [2]		108	30-150					4/25/15 11:12	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-02

Sampled: 4/17/2015 14:00

Sample ID: 15D0889-10

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cadmium	ND	0.0040	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:00	MJH
Copper	0.20	0.010	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:00	MJH
Lead	0.50	0.010	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:00	MJH
Mercury	0.00012	0.00010	mg/L	1		SW-846 7470A	4/21/15	4/22/15 9:42	SCB
Nickel	ND	0.010	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:00	MJH
Zinc	0.36	0.020	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:00	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-02

Sampled: 4/17/2015 14:00

Sample ID: 15D0889-10

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	7400	100	mg/L	100		SM21-22 4500 CL B	4/22/15	4/22/15 21:50	DJM
Flashpoint	> 212 °F		°F	1		SW-846 1010	4/23/15	4/23/15 20:30	DJM
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	4/17/15	4/17/15 23:50	DJM
Nitrate/Nitrite as N	ND	0.050	mg/L	1		SM 21-22 4500 NO3 F	4/22/15	4/22/15 15:55	AG
pH @15.2°C	7.1		pH Units	1	H-05	SM21-22 4500 H B	4/18/15	4/18/15 10:05	MMH
Phenol	ND	0.050	mg/L	1		EPA 420.1	4/23/15	4/24/15 11:30	LL
Total Kjeldahl Nitrogen	16	1.0	mg/L	1		SM19-22 4500-N Org B,C-NH3 C	4/22/15	4/23/15 12:30	VAK
Total Nitrogen	16	0.050	mg/L	1		SM19-22 4500-N Org B,C-NH3 C	4/24/15	4/24/15 7:41	LL
Total Solids	13000	10	mg/L	1		SM21-22 2540B	4/21/15	4/21/15 13:50	VAK
Total Suspended Solids	4200	20	mg/L	1		SM21-22 2540D	4/20/15	4/20/15 13:15	LL
Silica Gel Treated HEM (SGT-HEM)	ND	1.6	mg/L	1		EPA 1664B	4/21/15	4/21/15 12:00	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-02

Sampled: 4/17/2015 14:00

Sample ID: 15D0889-10

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbonaceous BOD	<4.4	4.4	mg/L	3		SM21-22 5210B		5/1/15 0:00	PEL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-04

Sampled: 4/17/2015 10:00

Sample ID: 15D0889-11

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	5.0	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Bromodichloromethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Bromoform	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Bromomethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Carbon Tetrachloride	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Chlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Chlorodibromomethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Chloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
2-Chloroethyl Vinyl Ether	ND	50	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Chloroform	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Chloromethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,2-Dichlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,3-Dichlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,4-Dichlorobenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,2-Dichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,1-Dichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,1-Dichloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
trans-1,2-Dichloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,2-Dichloropropane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
cis-1,3-Dichloropropene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
trans-1,3-Dichloropropene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Ethylbenzene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Methylene Chloride	ND	25	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Naphthalene	ND	10	µg/L	5	L-03	EPA 624	4/22/15	4/23/15 1:52	LBD
1,1,2,2-Tetrachloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Tetrachloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Toluene	ND	5.0	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5	L-03	EPA 624	4/22/15	4/23/15 1:52	LBD
1,1,1-Trichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
1,1,2-Trichloroethane	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Trichloroethylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
Vinyl Chloride	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
m+p Xylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD
o-Xylene	ND	10	µg/L	5		EPA 624	4/22/15	4/23/15 1:52	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.2	70-130	4/23/15 1:52
Toluene-d8	104	70-130	4/23/15 1:52
4-Bromofluorobenzene	99.8	70-130	4/23/15 1:52

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-04

Sampled: 4/17/2015 10:00

Sample ID: 15D0889-11

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		EPA 608	4/23/15	4/24/15 17:27	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		55.8	30-150					4/24/15 17:27	
Decachlorobiphenyl [2]		53.1	30-150					4/24/15 17:27	
Tetrachloro-m-xylene [1]		85.6	30-150					4/24/15 17:27	
Tetrachloro-m-xylene [2]		88.3	30-150					4/24/15 17:27	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-04

Sampled: 4/17/2015 10:00

Sample ID: 15D0889-11

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cadmium	0.019	0.0040	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:21	MJH
Copper	2.1	0.010	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:21	MJH
Lead	6.3	0.010	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:21	MJH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/21/15	4/22/15 9:43	SCB
Nickel	0.16	0.010	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:21	MJH
Zinc	6.3	0.020	mg/L	1		SW-846 6010C	4/22/15	4/24/15 16:21	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-04

Sampled: 4/17/2015 10:00

Sample ID: 15D0889-11

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	3300	100	mg/L	100		SM21-22 4500 CL B	4/22/15	4/22/15 21:50	DJM
Flashpoint	> 212 °F		°F	1		SW-846 1010	4/23/15	4/23/15 20:30	DJM
Hexavalent Chromium	ND	0.0040	mg/L	1	MS-07A	SW-846 7196A	4/17/15	4/17/15 23:50	DJM
Nitrate/Nitrite as N	ND	0.050	mg/L	1		SM 21-22 4500 NO3 F	4/22/15	4/22/15 15:55	AG
pH @19.8°C	7.3		pH Units	1	H-05	SM21-22 4500 H B	4/18/15	4/18/15 10:05	MMH
Phenol	ND	0.050	mg/L	1		EPA 420.1	4/23/15	4/24/15 11:30	LL
Total Kjeldahl Nitrogen	15	1.0	mg/L	1		SM19-22 4500-N Org B,C-NH3 C	4/22/15	4/23/15 12:30	VAK
Total Nitrogen	15	0.050	mg/L	1		SM19-22 4500-N Org B,C-NH3 C	4/24/15	4/24/15 7:41	LL
Total Solids	13000	10	mg/L	1		SM21-22 2540B	4/21/15	4/21/15 13:50	VAK
Total Suspended Solids	22000	50	mg/L	1		SM21-22 2540D	4/20/15	4/20/15 13:15	LL
Silica Gel Treated HEM (SGT-HEM)	ND	1.5	mg/L	1		EPA 1664B	4/21/15	4/21/15 12:00	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Porpoise Pedestrian Bridge, Quee

Sample Description:

Work Order: 15D0889

Date Received: 4/17/2015

Field Sample #: TWP-04

Sampled: 4/17/2015 10:00

Sample ID: 15D0889-11

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Carbonaceous BOD	33	33	mg/L	30		SM21-22 5210B		5/1/15 0:00	PEL

Sample Extraction Data

EPA 1664B

Lab Number [Field ID]	Batch	Initial [mL]	Date
15D0889-10 [TWP-02]	B119811	850	04/21/15
15D0889-11 [TWP-04]	B119811	920	04/21/15

EPA 420.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B119900	50.0	50.0	04/23/15
15D0889-11 [TWP-04]	B119900	50.0	50.0	04/23/15

Prep Method: SW-846 3510C-EPA 608

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B120042	1000	10.0	04/23/15
15D0889-11 [TWP-04]	B120042	1000	10.0	04/23/15

Prep Method: SW-846 5030B-EPA 624

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B119971	1	5.00	04/22/15
15D0889-11 [TWP-04]	B119971	1	5.00	04/22/15

SM 21-22 4500 NO3 F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B119996	25.0	25.0	04/22/15
15D0889-11 [TWP-04]	B119996	25.0	25.0	04/22/15

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
15D0889-09 [WC-01]	B119919	04/22/15

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
15D0889-01 [SB-01-5.5-6.0']	B120041	04/23/15
15D0889-02 [SB-01-COMP]	B120041	04/23/15
15D0889-03 [SB-02-3.5-4.0']	B120041	04/23/15
15D0889-04 [SB-02-COMP]	B120041	04/23/15
15D0889-05 [SB-03-4.5-5.0']	B120041	04/23/15
15D0889-06 [SB-03-COMP]	B120041	04/23/15
15D0889-07 [SB-04-4.5-5.0']	B120041	04/23/15
15D0889-08 [SB-04-COMP]	B120041	04/23/15

Sample Extraction Data

SM19-22 4500-N Org B,C-NH3 C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B119917	25.0	25.0	04/22/15
15D0889-11 [TWP-04]	B119917	25.0	25.0	04/22/15

SM19-22 4500-N Org B,C-NH3 C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B120155	50.0	50.0	04/24/15
15D0889-11 [TWP-04]	B120155	50.0	50.0	04/24/15

SM21-22 2540B

Lab Number [Field ID]	Batch	Initial [mL]	Date
15D0889-10 [TWP-02]	B119877	50.0	04/21/15
15D0889-11 [TWP-04]	B119877	50.0	04/21/15

SM21-22 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
15D0889-10 [TWP-02]	B119709	25.0	04/20/15
15D0889-11 [TWP-04]	B119709	10.0	04/20/15

SM21-22 4500 CL B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B120016	100	100	04/22/15
15D0889-11 [TWP-04]	B120016	100	100	04/22/15

SM21-22 4500 H B

Lab Number [Field ID]	Batch	Initial [mL]	Date
15D0889-10 [TWP-02]	B119663	50.0	04/18/15
15D0889-11 [TWP-04]	B119663	50.0	04/18/15

SW-846 1010

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B120132	50.0	50.0	04/23/15
15D0889-11 [TWP-04]	B120132	50.0	50.0	04/23/15

SW-846 1030

Lab Number [Field ID]	Batch	Initial [g]	Date
15D0889-09 [WC-01]	B119797	50.0	04/20/15

Sample Extraction Data

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-02 [SB-01-COMP]	B119951	0.969	50.0	04/22/15
15D0889-04 [SB-02-COMP]	B119951	0.940	50.0	04/22/15
15D0889-06 [SB-03-COMP]	B119951	1.02	50.0	04/22/15
15D0889-08 [SB-04-COMP]	B119951	1.08	50.0	04/22/15

Prep Method: SW-846 3005A-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B120002	50.0	50.0	04/22/15
15D0889-11 [TWP-04]	B120002	50.0	50.0	04/22/15

Prep Method: SW-846 3010A-SW-846 6010C

Leachates were extracted on 4/22/2015 per SW-846 1311 in Batch B119937

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B120088	50.0	50.0	04/23/15

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B119641	50.0	50.0	04/17/15
15D0889-11 [TWP-04]	B119641	50.0	50.0	04/17/15

Prep Method: SW-846 7470A Prep-SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-10 [TWP-02]	B119808	6.00	6.00	04/21/15
15D0889-11 [TWP-04]	B119808	6.00	6.00	04/21/15

Prep Method: SW-846 7470A Prep-SW-846 7470A

Leachates were extracted on 4/22/2015 per SW-846 1311 in Batch B119937

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B120059	6.00	6.00	04/23/15

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-02 [SB-01-COMP]	B119915	0.607	50.0	04/22/15
15D0889-04 [SB-02-COMP]	B119915	0.614	50.0	04/22/15
15D0889-06 [SB-03-COMP]	B119915	0.615	50.0	04/22/15
15D0889-08 [SB-04-COMP]	B119915	0.622	50.0	04/22/15

Prep Method: SW-846 5035/5030B-SW-846 8015C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-09 [WC-01]	B119724	15.1	17.6	04/20/15

Sample Extraction Data

Prep Method: SW-846 3546-SW-846 8015C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-09 [WC-01]	B119936	30.5	1.00	04/22/15

Prep Method: SW-846 3546-SW-846 8081B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-02 [SB-01-COMP]	B119880	10.4	10.0	04/21/15
15D0889-02RE1 [SB-01-COMP]	B119880	10.4	10.0	04/21/15
15D0889-04 [SB-02-COMP]	B119880	10.2	10.0	04/21/15
15D0889-04RE1 [SB-02-COMP]	B119880	10.2	10.0	04/21/15
15D0889-06 [SB-03-COMP]	B119880	10.0	10.0	04/21/15
15D0889-06RE1 [SB-03-COMP]	B119880	10.0	10.0	04/21/15
15D0889-08 [SB-04-COMP]	B119880	10.1	10.0	04/21/15
15D0889-08RE1 [SB-04-COMP]	B119880	10.1	10.0	04/21/15

Prep Method: SW-846 3510C-SW-846 8081B

Leachates were extracted on 4/22/2015 per SW-846 1311 in Batch B119937

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B120154	400	4.00	04/24/15

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-02 [SB-01-COMP]	B119881	10.4	10.0	04/21/15
15D0889-04 [SB-02-COMP]	B119881	10.2	10.0	04/21/15
15D0889-06 [SB-03-COMP]	B119881	10.0	10.0	04/21/15
15D0889-08 [SB-04-COMP]	B119881	10.1	10.0	04/21/15

Prep Method: SW-846 3510C-SW-846 8082A

Leachates were extracted on 4/22/2015 per SW-846 1311 in Batch B119937

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B120156	400	4.00	04/24/15

Prep Method: SW-846 8151-SW-846 8151A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-02 [SB-01-COMP]	B119785	20.1	5.00	04/21/15
15D0889-04 [SB-02-COMP]	B119785	20.1	5.00	04/21/15
15D0889-06 [SB-03-COMP]	B119785	20.2	5.00	04/21/15
15D0889-08 [SB-04-COMP]	B119785	20.2	5.00	04/21/15

Prep Method: SW-846 3510C-SW-846 8151A

Leachates were extracted on 4/22/2015 per SW-846 1311 in Batch B119937

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B120043	10.0	5.00	04/23/15

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 5030B-SW-846 8260C

Leachates were extracted on 4/21/2015 per SW-846 1311 in Batch B119819

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B119952	5.00	5.00	04/22/15

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-01 [SB-01-5.5-6.0']	B119989	5.40	10.0	04/22/15
15D0889-03 [SB-02-3.5-4.0']	B119989	5.20	10.0	04/22/15
15D0889-05 [SB-03-4.5-5.0']	B119989	5.80	10.0	04/22/15
15D0889-07 [SB-04-4.5-5.0']	B119989	5.60	10.0	04/22/15

Prep Method: SW-846 3546-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-02 [SB-01-COMP]	B119938	30.3	1.00	04/22/15
15D0889-02RE1 [SB-01-COMP]	B119938	30.3	1.00	04/22/15
15D0889-04 [SB-02-COMP]	B119938	30.0	1.00	04/22/15
15D0889-06 [SB-03-COMP]	B119938	31.2	1.00	04/22/15
15D0889-08 [SB-04-COMP]	B119938	30.4	1.00	04/22/15

Prep Method: SW-846 3510C-SW-846 8270D

Leachates were extracted on 4/22/2015 per SW-846 1311 in Batch B119937

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D0889-09 [WC-01]	B120157	200	1.00	04/24/15

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-09 [WC-01]	B119852	25.6	250	04/21/15

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-09 [WC-01]	B119853	25.6	250	04/21/15

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
15D0889-09 [WC-01]	B119662	20.0	04/18/15

SW-846 9095B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15D0889-09 [WC-01]	B119706	100	100	04/20/15

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119989 - SW-846 5035

Blank (B119989-BLK1)

Prepared & Analyzed: 04/22/15

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							R-05
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							R-05
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119989 - SW-846 5035

Blank (B119989-BLK1)

Prepared & Analyzed: 04/22/15

Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0040	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0471		mg/Kg wet	0.0500		94.2	70-130			
Surrogate: Toluene-d8	0.0480		mg/Kg wet	0.0500		95.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0484		mg/Kg wet	0.0500		96.8	70-130			

LCS (B119989-BS1)

Prepared & Analyzed: 04/22/15

Acetone	0.150	0.10	mg/Kg wet	0.200		75.2	70-160			†
Acrylonitrile	0.0191	0.0060	mg/Kg wet	0.0200		95.6	70-130			
tert-Amyl Methyl Ether (TAME)	0.0192	0.0010	mg/Kg wet	0.0200		96.0	70-130			
Benzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
Bromobenzene	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130			
Bromochloromethane	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			
Bromodichloromethane	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130			
Bromoform	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130			
Bromomethane	0.0101	0.010	mg/Kg wet	0.0200		50.6	40-130		R-05, V-20	†
2-Butanone (MEK)	0.181	0.040	mg/Kg wet	0.200		90.6	70-160			†
tert-Butyl Alcohol (TBA)	0.215	0.040	mg/Kg wet	0.200		108	40-130		R-05	†
n-Butylbenzene	0.0233	0.0020	mg/Kg wet	0.0200		117	70-130			
sec-Butylbenzene	0.0254	0.0020	mg/Kg wet	0.0200		127	70-130			
tert-Butylbenzene	0.0246	0.0020	mg/Kg wet	0.0200		123	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0203	0.0010	mg/Kg wet	0.0200		101	70-130			
Carbon Disulfide	0.0197	0.010	mg/Kg wet	0.0200		98.3	70-130			
Carbon Tetrachloride	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130			
Chlorobenzene	0.0240	0.0020	mg/Kg wet	0.0200		120	70-130			
Chlorodibromomethane	0.0225	0.0010	mg/Kg wet	0.0200		113	70-130			
Chloroethane	0.0205	0.020	mg/Kg wet	0.0200		102	70-130			
Chloroform	0.0199	0.0040	mg/Kg wet	0.0200		99.3	70-130			
Chloromethane	0.0166	0.010	mg/Kg wet	0.0200		82.9	70-130			
2-Chlorotoluene	0.0249	0.0020	mg/Kg wet	0.0200		124	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119989 - SW-846 5035										
LCS (B119989-BS1)										
					Prepared & Analyzed: 04/22/15					
4-Chlorotoluene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0244	0.0020	mg/Kg wet	0.0200		122	70-130			
1,2-Dibromoethane (EDB)	0.0215	0.0010	mg/Kg wet	0.0200		107	70-130			
Dibromomethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
1,2-Dichlorobenzene	0.0236	0.0020	mg/Kg wet	0.0200		118	70-130			
1,3-Dichlorobenzene	0.0243	0.0020	mg/Kg wet	0.0200		121	70-130			
1,4-Dichlorobenzene	0.0234	0.0020	mg/Kg wet	0.0200		117	70-130			
trans-1,4-Dichloro-2-butene	0.0219	0.0040	mg/Kg wet	0.0200		110	70-130			
Dichlorodifluoromethane (Freon 12)	0.0147	0.020	mg/Kg wet	0.0200		73.6	40-160			†
1,1-Dichloroethane	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
1,2-Dichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,1-Dichloroethylene	0.0220	0.0040	mg/Kg wet	0.0200		110	70-130			
cis-1,2-Dichloroethylene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130			
trans-1,2-Dichloroethylene	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130			
1,2-Dichloropropane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
1,3-Dichloropropane	0.0200	0.0010	mg/Kg wet	0.0200		99.8	70-130			
2,2-Dichloropropane	0.0179	0.0020	mg/Kg wet	0.0200		89.5	70-130			
1,1-Dichloropropene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130			
cis-1,3-Dichloropropene	0.0190	0.0010	mg/Kg wet	0.0200		94.9	70-130			
trans-1,3-Dichloropropene	0.0205	0.0010	mg/Kg wet	0.0200		102	70-130			
Diethyl Ether	0.0204	0.020	mg/Kg wet	0.0200		102	70-130			
Diisopropyl Ether (DIPE)	0.0203	0.0010	mg/Kg wet	0.0200		101	70-130			
1,4-Dioxane	0.243	0.10	mg/Kg wet	0.200		122	40-160			†
Ethylbenzene	0.0250	0.0020	mg/Kg wet	0.0200		125	70-130			
Hexachlorobutadiene	0.0248	0.0020	mg/Kg wet	0.0200		124	70-160			
2-Hexanone (MBK)	0.211	0.020	mg/Kg wet	0.200		105	70-160			†
Isopropylbenzene (Cumene)	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
p-Isopropyltoluene (p-Cymene)	0.0244	0.0020	mg/Kg wet	0.0200		122	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0197	0.0040	mg/Kg wet	0.0200		98.5	70-130			
Methylene Chloride	0.0201	0.020	mg/Kg wet	0.0200		100	40-160			†
4-Methyl-2-pentanone (MIBK)	0.216	0.020	mg/Kg wet	0.200		108	70-160			†
Naphthalene	0.0286	0.0040	mg/Kg wet	0.0200		143 *	40-130			L-07 †
n-Propylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
Styrene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
1,1,1,2-Tetrachloroethane	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130			
1,1,2,2-Tetrachloroethane	0.0234	0.0010	mg/Kg wet	0.0200		117	70-130			
Tetrachloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
Tetrahydrofuran	0.0215	0.010	mg/Kg wet	0.0200		108	70-130			
Toluene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2,3-Trichlorobenzene	0.0244	0.0020	mg/Kg wet	0.0200		122	70-130			
1,2,4-Trichlorobenzene	0.0234	0.0020	mg/Kg wet	0.0200		117	70-130			
1,3,5-Trichlorobenzene	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
1,1,1-Trichloroethane	0.0190	0.0040	mg/Kg wet	0.0200		95.2	70-130			
1,1,2-Trichloroethane	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130			
Trichloroethylene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
Trichlorofluoromethane (Freon 11)	0.0238	0.010	mg/Kg wet	0.0200		119	70-130			
1,2,3-Trichloropropane	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0203	0.010	mg/Kg wet	0.0200		102	70-130			
1,2,4-Trimethylbenzene	0.0241	0.0020	mg/Kg wet	0.0200		121	70-130			
1,3,5-Trimethylbenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130			
Vinyl Chloride	0.0186	0.010	mg/Kg wet	0.0200		92.8	40-130			†

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119989 - SW-846 5035										
LCS (B119989-BS1)										
Prepared & Analyzed: 04/22/15										
m+p Xylene	0.0415	0.0040	mg/Kg wet	0.0400		104	70-130			
o-Xylene	0.0245	0.0020	mg/Kg wet	0.0200		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0468		mg/Kg wet	0.0500		93.6	70-130			
Surrogate: Toluene-d8	0.0489		mg/Kg wet	0.0500		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.0502		mg/Kg wet	0.0500		100	70-130			
LCS Dup (B119989-BSD1)										
Prepared & Analyzed: 04/22/15										
Acetone	0.122	0.10	mg/Kg wet	0.200		61.1 *	70-160	20.7	25	L-07 †
Acrylonitrile	0.0160	0.0060	mg/Kg wet	0.0200		80.1	70-130	17.6	25	
tert-Amyl Methyl Ether (TAME)	0.0167	0.0010	mg/Kg wet	0.0200		83.3	70-130	14.2	25	
Benzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4	70-130	11.9	25	
Bromobenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	13.5	25	
Bromochloromethane	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130	10.5	25	
Bromodichloromethane	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130	14.4	25	
Bromoform	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130	10.3	25	
Bromomethane	0.0132	0.010	mg/Kg wet	0.0200		66.0	40-130	26.4 *	25	R-05, V-20 †
2-Butanone (MEK)	0.148	0.040	mg/Kg wet	0.200		74.2	70-160	19.9	25	†
tert-Butyl Alcohol (TBA)	0.162	0.040	mg/Kg wet	0.200		81.1	40-130	28.0 *	25	R-05 †
n-Butylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130	15.7	25	
sec-Butylbenzene	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130	14.6	25	
tert-Butylbenzene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-160	14.1	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0179	0.0010	mg/Kg wet	0.0200		89.4	70-130	12.6	25	
Carbon Disulfide	0.0174	0.010	mg/Kg wet	0.0200		86.8	70-130	12.4	25	
Carbon Tetrachloride	0.0159	0.0020	mg/Kg wet	0.0200		79.6	70-130	9.34	25	
Chlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	13.0	25	
Chlorodibromomethane	0.0193	0.0010	mg/Kg wet	0.0200		96.3	70-130	15.7	25	
Chloroethane	0.0186	0.020	mg/Kg wet	0.0200		92.9	70-130	9.63	25	
Chloroform	0.0176	0.0040	mg/Kg wet	0.0200		88.2	70-130	11.8	25	
Chloromethane	0.0148	0.010	mg/Kg wet	0.0200		73.9	70-130	11.5	25	
2-Chlorotoluene	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130	13.2	25	
4-Chlorotoluene	0.0170	0.0020	mg/Kg wet	0.0200		85.2	70-130	13.8	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	19.8	25	
1,2-Dibromoethane (EDB)	0.0185	0.0010	mg/Kg wet	0.0200		92.3	70-130	15.1	25	
Dibromomethane	0.0182	0.0020	mg/Kg wet	0.0200		91.0	70-130	14.4	25	
1,2-Dichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	13.6	25	
1,3-Dichlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	13.6	25	
1,4-Dichlorobenzene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130	12.3	25	
trans-1,4-Dichloro-2-butene	0.0187	0.0040	mg/Kg wet	0.0200		93.6	70-130	15.7	25	
Dichlorodifluoromethane (Freon 12)	0.0131	0.020	mg/Kg wet	0.0200		65.3	40-160	12.0	25	†
1,1-Dichloroethane	0.0176	0.0020	mg/Kg wet	0.0200		88.1	70-130	13.3	25	
1,2-Dichloroethane	0.0182	0.0020	mg/Kg wet	0.0200		90.9	70-130	12.6	25	
1,1-Dichloroethylene	0.0198	0.0040	mg/Kg wet	0.0200		98.8	70-130	10.7	25	
cis-1,2-Dichloroethylene	0.0165	0.0020	mg/Kg wet	0.0200		82.5	70-130	13.2	25	
trans-1,2-Dichloroethylene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130	11.5	25	
1,2-Dichloropropane	0.0182	0.0020	mg/Kg wet	0.0200		91.1	70-130	13.4	25	
1,3-Dichloropropane	0.0173	0.0010	mg/Kg wet	0.0200		86.5	70-130	14.3	25	
2,2-Dichloropropane	0.0158	0.0020	mg/Kg wet	0.0200		78.9	70-130	12.6	25	
1,1-Dichloropropene	0.0177	0.0020	mg/Kg wet	0.0200		88.6	70-130	11.4	25	
cis-1,3-Dichloropropene	0.0163	0.0010	mg/Kg wet	0.0200		81.3	70-130	15.4	25	
trans-1,3-Dichloropropene	0.0177	0.0010	mg/Kg wet	0.0200		88.5	70-130	14.5	25	
Diethyl Ether	0.0180	0.020	mg/Kg wet	0.0200		90.2	70-130	12.1	25	
Diisopropyl Ether (DIPE)	0.0178	0.0010	mg/Kg wet	0.0200		89.2	70-130	12.7	25	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119989 - SW-846 5035										
LCS Dup (B119989-BSD1)										
Prepared & Analyzed: 04/22/15										
1,4-Dioxane	0.179	0.10	mg/Kg wet	0.200		89.4	40-160	30.7	50	† ‡
Ethylbenzene	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	12.0	25	
Hexachlorobutadiene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-160	13.9	25	
2-Hexanone (MBK)	0.175	0.020	mg/Kg wet	0.200		87.5	70-160	18.4	25	†
Isopropylbenzene (Cumene)	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	12.5	25	
p-Isopropyltoluene (p-Cymene)	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	13.7	25	
Methyl tert-Butyl Ether (MTBE)	0.0177	0.0040	mg/Kg wet	0.0200		88.4	70-130	10.8	25	
Methylene Chloride	0.0180	0.020	mg/Kg wet	0.0200		90.2	40-160	10.7	25	†
4-Methyl-2-pentanone (MIBK)	0.180	0.020	mg/Kg wet	0.200		90.2	70-160	17.7	25	†
Naphthalene	0.0244	0.0040	mg/Kg wet	0.0200		122	40-130	15.8	25	†
n-Propylbenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130	14.3	25	
Styrene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	11.1	25	
1,1,1,2-Tetrachloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130	10.8	25	
1,1,2,2-Tetrachloroethane	0.0203	0.0010	mg/Kg wet	0.0200		101	70-130	14.5	25	
Tetrachloroethylene	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130	11.9	25	
Tetrahydrofuran	0.0184	0.010	mg/Kg wet	0.0200		92.1	70-130	15.5	25	
Toluene	0.0180	0.0020	mg/Kg wet	0.0200		89.9	70-130	12.9	25	
1,2,3-Trichlorobenzene	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130	13.9	25	
1,2,4-Trichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	13.7	25	
1,3,5-Trichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130	12.6	25	
1,1,1-Trichloroethane	0.0170	0.0040	mg/Kg wet	0.0200		85.2	70-130	11.1	25	
1,1,2-Trichloroethane	0.0181	0.0020	mg/Kg wet	0.0200		90.7	70-130	14.2	25	
Trichloroethylene	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-130	15.4	25	
Trichlorofluoromethane (Freon 11)	0.0208	0.010	mg/Kg wet	0.0200		104	70-130	13.4	25	
1,2,3-Trichloropropane	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	14.8	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0182	0.010	mg/Kg wet	0.0200		90.8	70-130	11.1	25	
1,2,4-Trimethylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	15.1	25	
1,3,5-Trimethylbenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130	13.0	25	
Vinyl Chloride	0.0164	0.010	mg/Kg wet	0.0200		82.1	40-130	12.2	25	†
m+p Xylene	0.0368	0.0040	mg/Kg wet	0.0400		92.0	70-130	12.0	25	
o-Xylene	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130	12.3	25	
Surrogate: 1,2-Dichloroethane-d4	0.0461		mg/Kg wet	0.0500		92.2	70-130			
Surrogate: Toluene-d8	0.0482		mg/Kg wet	0.0500		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.0490		mg/Kg wet	0.0500		98.0	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119971 - SW-846 5030B

Blank (B119971-BLK1)

Prepared & Analyzed: 04/22/15

Benzene	ND	1.0	µg/L							
Bromodichloromethane	ND	2.0	µg/L							
Bromoform	ND	2.0	µg/L							
Bromomethane	ND	2.0	µg/L							
Carbon Tetrachloride	ND	2.0	µg/L							
Chlorobenzene	ND	2.0	µg/L							
Chlorodibromomethane	ND	2.0	µg/L							
Chloroethane	ND	2.0	µg/L							
2-Chloroethyl Vinyl Ether	ND	10	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
1,2-Dichlorobenzene	ND	2.0	µg/L							
1,3-Dichlorobenzene	ND	2.0	µg/L							
1,4-Dichlorobenzene	ND	2.0	µg/L							
1,2-Dichloroethane	ND	2.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
1,1-Dichloroethane	ND	2.0	µg/L							
1,1-Dichloroethylene	ND	2.0	µg/L							
trans-1,2-Dichloroethylene	ND	2.0	µg/L							
1,2-Dichloropropane	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	2.0	µg/L							
trans-1,3-Dichloropropene	ND	2.0	µg/L							
Ethylbenzene	ND	2.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
Naphthalene	ND	2.0	µg/L							L-03
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L							
Tetrachloroethylene	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							L-03
1,1,1-Trichloroethane	ND	2.0	µg/L							
1,1,2-Trichloroethane	ND	2.0	µg/L							
Trichloroethylene	ND	2.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	2.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.0		µg/L	25.0		91.9	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	25.3		µg/L	25.0		101	70-130			

LCS (B119971-BS1)

Prepared & Analyzed: 04/22/15

Benzene	10.8	1.0	µg/L	10.0		108	37-151			
Bromodichloromethane	10.6	2.0	µg/L	10.0		106	35-155			
Bromoform	10.3	2.0	µg/L	10.0		103	45-169			
Bromomethane	12.3	2.0	µg/L	10.0		123	20-242			
Carbon Tetrachloride	11.7	2.0	µg/L	10.0		117	70-140			
Chlorobenzene	9.66	2.0	µg/L	10.0		96.6	37-160			
Chlorodibromomethane	10.3	2.0	µg/L	10.0		103	53-149			
Chloroethane	12.7	2.0	µg/L	10.0		127	70-130			
2-Chloroethyl Vinyl Ether	106	10	µg/L	100		106	10-305			
Chloroform	11.1	2.0	µg/L	10.0		111	51-138			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119971 - SW-846 5030B										
LCS (B119971-BS1)										
Prepared & Analyzed: 04/22/15										
Chloromethane	9.84	2.0	µg/L	10.0		98.4	20-273			
1,2-Dichlorobenzene	8.89	2.0	µg/L	10.0		88.9	18-190			
1,3-Dichlorobenzene	8.84	2.0	µg/L	10.0		88.4	59-156			
1,4-Dichlorobenzene	8.63	2.0	µg/L	10.0		86.3	18-190			
1,2-Dichloroethane	9.93	2.0	µg/L	10.0		99.3	49-155			
cis-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0		115	70-130			
1,1-Dichloroethane	11.4	2.0	µg/L	10.0		114	59-155			
1,1-Dichloroethylene	12.2	2.0	µg/L	10.0		122	20-234			
trans-1,2-Dichloroethylene	11.6	2.0	µg/L	10.0		116	54-156			
1,2-Dichloropropane	10.7	2.0	µg/L	10.0		107	20-210			
cis-1,3-Dichloropropene	11.3	2.0	µg/L	10.0		113	20-227			
trans-1,3-Dichloropropene	11.4	2.0	µg/L	10.0		114	17-183			
Ethylbenzene	9.97	2.0	µg/L	10.0		99.7	37-162			
Methyl tert-Butyl Ether (MTBE)	10.9	2.0	µg/L	10.0		109	70-130			
Methylene Chloride	10.6	5.0	µg/L	10.0		106	50-221			
Naphthalene	5.79	2.0	µg/L	10.0		57.9	* 70-130			L-03
1,1,2,2-Tetrachloroethane	8.78	2.0	µg/L	10.0		87.8	46-157			
Tetrachloroethylene	11.4	2.0	µg/L	10.0		114	64-148			
Toluene	10.9	1.0	µg/L	10.0		109	47-150			
1,2,4-Trichlorobenzene	6.65	1.0	µg/L	10.0		66.5	* 70-130			L-03
1,1,1-Trichloroethane	11.3	2.0	µg/L	10.0		113	52-162			
1,1,2-Trichloroethane	10.7	2.0	µg/L	10.0		107	52-150			
Trichloroethylene	11.0	2.0	µg/L	10.0		110	71-157			
Trichlorofluoromethane (Freon 11)	11.2	2.0	µg/L	10.0		112	17-181			
Vinyl Chloride	11.7	2.0	µg/L	10.0		117	20-251			
m+p Xylene	20.3	2.0	µg/L	20.0		102	70-130			
o-Xylene	9.92	2.0	µg/L	10.0		99.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	22.7		µg/L	25.0		90.8	70-130			
Surrogate: Toluene-d8	25.9		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0		102	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119938 - SW-846 3546

Blank (B119938-BLK1)

Prepared: 04/22/15 Analyzed: 04/23/15

Acenaphthene	ND	0.16	mg/Kg wet							
Acenaphthylene	ND	0.16	mg/Kg wet							
Acetophenone	ND	0.33	mg/Kg wet							
Aniline	ND	0.33	mg/Kg wet							R-05
Anthracene	ND	0.16	mg/Kg wet							
Benzidine	ND	0.64	mg/Kg wet							R-05, V-05
Benzo(a)anthracene	ND	0.16	mg/Kg wet							
Benzo(a)pyrene	ND	0.16	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.16	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.16	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.16	mg/Kg wet							
Benzoic Acid	ND	0.97	mg/Kg wet							L-04
Bis(2-chloroethoxy)methane	ND	0.33	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.33	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.33	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.33	mg/Kg wet							
4-Bromophenylphenylether	ND	0.33	mg/Kg wet							
Butylbenzylphthalate	ND	0.33	mg/Kg wet							
Carbazole	ND	0.16	mg/Kg wet							
4-Chloroaniline	ND	0.64	mg/Kg wet							R-05
4-Chloro-3-methylphenol	ND	0.64	mg/Kg wet							
2-Chloronaphthalene	ND	0.33	mg/Kg wet							
2-Chlorophenol	ND	0.33	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.33	mg/Kg wet							
Chrysene	ND	0.16	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.16	mg/Kg wet							
Dibenzofuran	ND	0.33	mg/Kg wet							
Di-n-butylphthalate	ND	0.33	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.33	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.33	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.33	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.16	mg/Kg wet							
2,4-Dichlorophenol	ND	0.33	mg/Kg wet							
Diethylphthalate	ND	0.33	mg/Kg wet							
2,4-Dimethylphenol	ND	0.33	mg/Kg wet							
Dimethylphthalate	ND	0.33	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.33	mg/Kg wet							
2,4-Dinitrophenol	ND	0.64	mg/Kg wet							L-04
2,4-Dinitrotoluene	ND	0.33	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.33	mg/Kg wet							
Di-n-octylphthalate	ND	0.33	mg/Kg wet							
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.33	mg/Kg wet							
Fluoranthene	ND	0.16	mg/Kg wet							
Fluorene	ND	0.16	mg/Kg wet							
Hexachlorobenzene	ND	0.33	mg/Kg wet							
Hexachlorobutadiene	ND	0.33	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.33	mg/Kg wet							V-05
Hexachloroethane	ND	0.33	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.16	mg/Kg wet							
Isophorone	ND	0.33	mg/Kg wet							
1-Methylnaphthalene	ND	0.16	mg/Kg wet							
2-Methylnaphthalene	ND	0.16	mg/Kg wet							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119938 - SW-846 3546

Blank (B119938-BLK1)

Prepared: 04/22/15 Analyzed: 04/23/15

2-Methylphenol	ND	0.33	mg/Kg wet							
3/4-Methylphenol	ND	0.33	mg/Kg wet							
Naphthalene	ND	0.16	mg/Kg wet							
2-Nitroaniline	ND	0.33	mg/Kg wet							
3-Nitroaniline	ND	0.33	mg/Kg wet							
4-Nitroaniline	ND	0.33	mg/Kg wet							
Nitrobenzene	ND	0.33	mg/Kg wet							
2-Nitrophenol	ND	0.33	mg/Kg wet							
4-Nitrophenol	ND	0.64	mg/Kg wet							
N-Nitrosodimethylamine	ND	0.33	mg/Kg wet							
N-Nitrosodiphenylamine	ND	0.33	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.33	mg/Kg wet							
Pentachloronitrobenzene	ND	0.33	mg/Kg wet							V-16
Pentachlorophenol	ND	0.33	mg/Kg wet							
Phenanthrene	ND	0.16	mg/Kg wet							
Phenol	ND	0.33	mg/Kg wet							
Pyrene	ND	0.16	mg/Kg wet							
Pyridine	ND	0.33	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.33	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.33	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.33	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.33	mg/Kg wet							
Surrogate: 2-Fluorophenol	4.48		mg/Kg wet	6.45		69.4	30-130			
Surrogate: Phenol-d6	4.60		mg/Kg wet	6.45		71.3	30-130			
Surrogate: Nitrobenzene-d5	2.24		mg/Kg wet	3.23		69.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.26		mg/Kg wet	3.23		69.9	30-130			
Surrogate: 2,4,6-Tribromophenol	4.08		mg/Kg wet	6.45		63.2	30-130			
Surrogate: p-Terphenyl-d14	2.91		mg/Kg wet	3.23		90.1	30-130			

LCS (B119938-BS1)

Prepared: 04/22/15 Analyzed: 04/23/15

Acenaphthene	1.23	0.17	mg/Kg wet	1.64		74.9	40-140			
Acenaphthylene	1.23	0.17	mg/Kg wet	1.64		74.8	40-140			
Acetophenone	1.18	0.33	mg/Kg wet	1.64		72.2	40-140			
Aniline	0.672	0.33	mg/Kg wet	1.64		41.0	10-140			R-05 †
Anthracene	1.32	0.17	mg/Kg wet	1.64		80.8	40-140			
Benzidine	1.25	0.65	mg/Kg wet	1.64		76.4	40-140			V-05, R-05
Benzo(a)anthracene	1.34	0.17	mg/Kg wet	1.64		81.7	40-140			
Benzo(a)pyrene	1.34	0.17	mg/Kg wet	1.64		81.8	40-140			
Benzo(b)fluoranthene	1.31	0.17	mg/Kg wet	1.64		80.0	40-140			
Benzo(g,h,i)perylene	1.39	0.17	mg/Kg wet	1.64		84.7	40-140			
Benzo(k)fluoranthene	1.37	0.17	mg/Kg wet	1.64		83.6	40-140			
Benzoic Acid	0.206	0.98	mg/Kg wet	1.64		12.6 *	30-130			L-04
Bis(2-chloroethoxy)methane	1.28	0.33	mg/Kg wet	1.64		78.2	40-140			
Bis(2-chloroethyl)ether	1.24	0.33	mg/Kg wet	1.64		75.4	40-140			
Bis(2-chloroisopropyl)ether	1.13	0.33	mg/Kg wet	1.64		68.7	40-140			
Bis(2-Ethylhexyl)phthalate	1.42	0.33	mg/Kg wet	1.64		86.4	40-140			
4-Bromophenylphenylether	1.31	0.33	mg/Kg wet	1.64		80.1	40-140			
Butylbenzylphthalate	1.40	0.33	mg/Kg wet	1.64		85.3	40-140			
Carbazole	1.33	0.17	mg/Kg wet	1.64		81.1	40-140			
4-Chloroaniline	0.823	0.65	mg/Kg wet	1.64		50.2	10-140			R-05 †
4-Chloro-3-methylphenol	1.37	0.65	mg/Kg wet	1.64		83.7	30-130			
2-Chloronaphthalene	1.07	0.33	mg/Kg wet	1.64		65.5	40-140			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119938 - SW-846 3546										
LCS (B119938-BS1)										
					Prepared: 04/22/15 Analyzed: 04/23/15					
2-Chlorophenol	1.17	0.33	mg/Kg wet	1.64		71.4	30-130			
4-Chlorophenylphenylether	1.29	0.33	mg/Kg wet	1.64		78.5	40-140			
Chrysene	1.32	0.17	mg/Kg wet	1.64		80.7	40-140			
Dibenz(a,h)anthracene	1.38	0.17	mg/Kg wet	1.64		84.1	40-140			
Dibenzofuran	1.30	0.33	mg/Kg wet	1.64		79.1	40-140			
Di-n-butylphthalate	1.34	0.33	mg/Kg wet	1.64		81.6	40-140			
1,2-Dichlorobenzene	1.08	0.33	mg/Kg wet	1.64		66.1	40-140			
1,3-Dichlorobenzene	1.06	0.33	mg/Kg wet	1.64		64.5	40-140			
1,4-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.64		65.2	40-140			
3,3-Dichlorobenzidine	0.932	0.17	mg/Kg wet	1.64		56.8	20-140			†
2,4-Dichlorophenol	1.29	0.33	mg/Kg wet	1.64		78.5	30-130			
Diethylphthalate	1.31	0.33	mg/Kg wet	1.64		79.7	40-140			
2,4-Dimethylphenol	1.31	0.33	mg/Kg wet	1.64		80.0	30-130			
Dimethylphthalate	1.31	0.33	mg/Kg wet	1.64		79.9	40-140			
4,6-Dinitro-2-methylphenol	0.746	0.33	mg/Kg wet	1.64		45.5	30-130			
2,4-Dinitrophenol	0.443	0.65	mg/Kg wet	1.64		27.0	* 30-130			L-04
2,4-Dinitrotoluene	1.34	0.33	mg/Kg wet	1.64		81.5	40-140			
2,6-Dinitrotoluene	1.34	0.33	mg/Kg wet	1.64		81.5	40-140			
Di-n-octylphthalate	1.29	0.33	mg/Kg wet	1.64		78.5	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	1.38	0.33	mg/Kg wet	1.64		83.9	40-140			
Fluoranthene	1.28	0.17	mg/Kg wet	1.64		78.3	40-140			
Fluorene	1.30	0.17	mg/Kg wet	1.64		79.1	40-140			
Hexachlorobenzene	1.33	0.33	mg/Kg wet	1.64		81.3	40-140			
Hexachlorobutadiene	1.15	0.33	mg/Kg wet	1.64		70.1	40-140			
Hexachlorocyclopentadiene	1.06	0.33	mg/Kg wet	1.64		64.8	40-140			V-05
Hexachloroethane	1.06	0.33	mg/Kg wet	1.64		64.6	40-140			
Indeno(1,2,3-cd)pyrene	1.35	0.17	mg/Kg wet	1.64		82.5	40-140			
Isophorone	1.32	0.33	mg/Kg wet	1.64		80.8	40-140			
1-Methylnaphthalene	1.15	0.17	mg/Kg wet	1.64		70.0	40-140			
2-Methylnaphthalene	1.22	0.17	mg/Kg wet	1.64		74.2	40-140			
2-Methylphenol	1.19	0.33	mg/Kg wet	1.64		72.8	30-130			
3/4-Methylphenol	1.29	0.33	mg/Kg wet	1.64		78.4	30-130			
Naphthalene	1.15	0.17	mg/Kg wet	1.64		70.0	40-140			
2-Nitroaniline	1.27	0.33	mg/Kg wet	1.64		77.3	40-140			
3-Nitroaniline	1.17	0.33	mg/Kg wet	1.64		71.2	30-140			†
4-Nitroaniline	1.27	0.33	mg/Kg wet	1.64		77.3	40-140			
Nitrobenzene	1.23	0.33	mg/Kg wet	1.64		75.1	40-140			
2-Nitrophenol	1.14	0.33	mg/Kg wet	1.64		69.4	30-130			
4-Nitrophenol	1.39	0.65	mg/Kg wet	1.64		85.0	30-130			
N-Nitrosodimethylamine	1.05	0.33	mg/Kg wet	1.64		63.8	40-140			
N-Nitrosodiphenylamine	1.74	0.33	mg/Kg wet	1.64		106	40-140			
N-Nitrosodi-n-propylamine	1.20	0.33	mg/Kg wet	1.64		73.4	40-140			
Pentachloronitrobenzene	1.35	0.33	mg/Kg wet	1.64		82.4	40-140			V-16
Pentachlorophenol	0.905	0.33	mg/Kg wet	1.64		55.2	30-130			
Phenanthrene	1.35	0.17	mg/Kg wet	1.64		82.4	40-140			
Phenol	1.19	0.33	mg/Kg wet	1.64		72.8	30-130			
Pyrene	1.44	0.17	mg/Kg wet	1.64		87.6	40-140			
Pyridine	0.850	0.33	mg/Kg wet	1.64		51.8	30-140			†
1,2,4,5-Tetrachlorobenzene	1.16	0.33	mg/Kg wet	1.64		70.6	40-140			
1,2,4-Trichlorobenzene	1.17	0.33	mg/Kg wet	1.64		71.5	40-140			
2,4,5-Trichlorophenol	1.22	0.33	mg/Kg wet	1.64		74.3	30-130			
2,4,6-Trichlorophenol	1.21	0.33	mg/Kg wet	1.64		73.9	30-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119938 - SW-846 3546

LCS (B119938-BS1)

Prepared: 04/22/15 Analyzed: 04/23/15

Surrogate: 2-Fluorophenol	4.91		mg/Kg wet	6.56		74.9	30-130			
Surrogate: Phenol-d6	5.09		mg/Kg wet	6.56		77.7	30-130			
Surrogate: Nitrobenzene-d5	2.45		mg/Kg wet	3.28		74.8	30-130			
Surrogate: 2-Fluorobiphenyl	2.52		mg/Kg wet	3.28		76.9	30-130			
Surrogate: 2,4,6-Tribromophenol	5.49		mg/Kg wet	6.56		83.7	30-130			
Surrogate: p-Terphenyl-d14	3.13		mg/Kg wet	3.28		95.6	30-130			

LCS Dup (B119938-BSD1)

Prepared: 04/22/15 Analyzed: 04/23/15

Acenaphthene	1.22	0.17	mg/Kg wet	1.63		74.9	40-140	0.707	30	
Acenaphthylene	1.22	0.17	mg/Kg wet	1.63		74.9	40-140	0.440	30	
Acetophenone	1.16	0.33	mg/Kg wet	1.63		71.2	40-140	1.99	30	
Aniline	1.12	0.33	mg/Kg wet	1.63		68.8	10-140	50.0	50	R-05 † ‡
Anthracene	1.36	0.17	mg/Kg wet	1.63		83.2	40-140	2.32	30	
Benzidine	2.12	0.64	mg/Kg wet	1.63		130	40-140	51.4 *	30	R-05, V-05
Benzo(a)anthracene	1.37	0.17	mg/Kg wet	1.63		84.3	40-140	2.55	30	
Benzo(a)pyrene	1.38	0.17	mg/Kg wet	1.63		84.7	40-140	2.85	30	
Benzo(b)fluoranthene	1.36	0.17	mg/Kg wet	1.63		83.7	40-140	3.82	30	
Benzo(g,h,i)perylene	1.42	0.17	mg/Kg wet	1.63		87.1	40-140	2.16	30	
Benzo(k)fluoranthene	1.38	0.17	mg/Kg wet	1.63		84.6	40-140	0.512	30	
Benzoic Acid	0.186	0.98	mg/Kg wet	1.63		11.4 *	30-130	10.1	50	L-04 ‡
Bis(2-chloroethoxy)methane	1.23	0.33	mg/Kg wet	1.63		75.6	40-140	4.01	30	
Bis(2-chloroethyl)ether	1.20	0.33	mg/Kg wet	1.63		74.0	40-140	2.61	30	
Bis(2-chloroisopropyl)ether	1.13	0.33	mg/Kg wet	1.63		69.4	40-140	0.331	30	
Bis(2-Ethylhexyl)phthalate	1.48	0.33	mg/Kg wet	1.63		91.1	40-140	4.60	30	
4-Bromophenylphenylether	1.34	0.33	mg/Kg wet	1.63		82.2	40-140	1.91	30	
Butylbenzylphthalate	1.42	0.33	mg/Kg wet	1.63		87.5	40-140	1.87	30	
Carbazole	1.36	0.17	mg/Kg wet	1.63		83.6	40-140	2.38	30	
4-Chloroaniline	1.18	0.64	mg/Kg wet	1.63		72.6	10-140	35.9 *	30	R-05 †
4-Chloro-3-methylphenol	1.33	0.64	mg/Kg wet	1.63		81.6	30-130	3.10	30	
2-Chloronaphthalene	1.04	0.33	mg/Kg wet	1.63		63.8	40-140	3.38	30	
2-Chlorophenol	1.16	0.33	mg/Kg wet	1.63		71.2	30-130	0.962	30	
4-Chlorophenylphenylether	1.31	0.33	mg/Kg wet	1.63		80.3	40-140	1.69	30	
Chrysene	1.39	0.17	mg/Kg wet	1.63		85.3	40-140	4.94	30	
Dibenz(a,h)anthracene	1.42	0.17	mg/Kg wet	1.63		87.1	40-140	2.88	30	
Dibenzofuran	1.26	0.33	mg/Kg wet	1.63		77.5	40-140	2.72	30	
Di-n-butylphthalate	1.38	0.33	mg/Kg wet	1.63		84.8	40-140	3.17	30	
1,2-Dichlorobenzene	1.10	0.33	mg/Kg wet	1.63		67.7	40-140	1.71	30	
1,3-Dichlorobenzene	1.06	0.33	mg/Kg wet	1.63		65.3	40-140	0.580	30	
1,4-Dichlorobenzene	1.08	0.33	mg/Kg wet	1.63		66.3	40-140	0.989	30	
3,3-Dichlorobenzidine	1.49	0.17	mg/Kg wet	1.63		91.6	20-140	46.2	50	† ‡
2,4-Dichlorophenol	1.22	0.33	mg/Kg wet	1.63		74.8	30-130	5.51	30	
Diethylphthalate	1.33	0.33	mg/Kg wet	1.63		81.4	40-140	1.53	30	
2,4-Dimethylphenol	1.24	0.33	mg/Kg wet	1.63		75.9	30-130	5.91	30	
Dimethylphthalate	1.33	0.33	mg/Kg wet	1.63		81.7	40-140	1.50	30	
4,6-Dinitro-2-methylphenol	0.677	0.33	mg/Kg wet	1.63		41.6	30-130	9.66	30	
2,4-Dinitrophenol	0.401	0.64	mg/Kg wet	1.63		24.6 *	30-130	9.95	30	L-04
2,4-Dinitrotoluene	1.34	0.33	mg/Kg wet	1.63		82.3	40-140	0.372	30	
2,6-Dinitrotoluene	1.34	0.33	mg/Kg wet	1.63		82.4	40-140	0.371	30	
Di-n-octylphthalate	1.30	0.33	mg/Kg wet	1.63		80.0	40-140	1.29	30	
1,2-Diphenylhydrazine (as Azobenzene)	1.38	0.33	mg/Kg wet	1.63		84.5	40-140	0.0828	30	
Fluoranthene	1.32	0.17	mg/Kg wet	1.63		81.3	40-140	3.16	30	
Fluorene	1.26	0.17	mg/Kg wet	1.63		77.4	40-140	2.82	30	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119938 - SW-846 3546										
LCS Dup (B119938-BSD1)										
					Prepared: 04/22/15 Analyzed: 04/23/15					
Hexachlorobenzene	1.35	0.33	mg/Kg wet	1.63		83.0	40-140	1.37	30	
Hexachlorobutadiene	1.16	0.33	mg/Kg wet	1.63		70.9	40-140	0.538	30	
Hexachlorocyclopentadiene	1.04	0.33	mg/Kg wet	1.63		64.2	40-140	1.71	30	V-05
Hexachloroethane	1.09	0.33	mg/Kg wet	1.63		66.9	40-140	2.75	30	
Indeno(1,2,3-cd)pyrene	1.38	0.17	mg/Kg wet	1.63		84.9	40-140	2.29	30	
Isophorone	1.28	0.33	mg/Kg wet	1.63		78.8	40-140	3.16	30	
1-Methylnaphthalene	1.11	0.17	mg/Kg wet	1.63		68.3	40-140	3.17	30	
2-Methylnaphthalene	1.17	0.17	mg/Kg wet	1.63		72.1	40-140	3.58	30	
2-Methylphenol	1.17	0.33	mg/Kg wet	1.63		71.8	30-130	2.15	30	
3/4-Methylphenol	1.23	0.33	mg/Kg wet	1.63		75.4	30-130	4.53	30	
Naphthalene	1.13	0.17	mg/Kg wet	1.63		69.3	40-140	1.66	30	
2-Nitroaniline	1.28	0.33	mg/Kg wet	1.63		78.6	40-140	1.04	30	
3-Nitroaniline	1.28	0.33	mg/Kg wet	1.63		78.5	30-140	9.05	30	†
4-Nitroaniline	1.34	0.33	mg/Kg wet	1.63		82.4	40-140	5.63	30	
Nitrobenzene	1.19	0.33	mg/Kg wet	1.63		72.9	40-140	3.71	30	
2-Nitrophenol	1.14	0.33	mg/Kg wet	1.63		69.7	30-130	0.280	30	
4-Nitrophenol	1.46	0.64	mg/Kg wet	1.63		89.8	30-130	4.79	50	‡
N-Nitrosodimethylamine	1.09	0.33	mg/Kg wet	1.63		66.9	40-140	4.09	30	
N-Nitrosodiphenylamine	1.77	0.33	mg/Kg wet	1.63		109	40-140	1.67	30	
N-Nitrosodi-n-propylamine	1.18	0.33	mg/Kg wet	1.63		72.6	40-140	1.75	30	
Pentachloronitrobenzene	1.41	0.33	mg/Kg wet	1.63		86.5	40-140	4.20	30	V-16
Pentachlorophenol	0.953	0.33	mg/Kg wet	1.63		58.5	30-130	5.26	30	
Phenanthrene	1.37	0.17	mg/Kg wet	1.63		84.2	40-140	1.53	30	
Phenol	1.21	0.33	mg/Kg wet	1.63		74.2	30-130	1.22	30	
Pyrene	1.45	0.17	mg/Kg wet	1.63		89.0	40-140	0.955	30	
Pyridine	0.949	0.33	mg/Kg wet	1.63		58.3	30-140	11.0	30	†
1,2,4,5-Tetrachlorobenzene	1.13	0.33	mg/Kg wet	1.63		69.5	40-140	2.34	30	
1,2,4-Trichlorobenzene	1.13	0.33	mg/Kg wet	1.63		69.4	40-140	3.69	30	
2,4,5-Trichlorophenol	1.22	0.33	mg/Kg wet	1.63		74.7	30-130	0.143	30	
2,4,6-Trichlorophenol	1.22	0.33	mg/Kg wet	1.63		74.8	30-130	0.610	30	
Surrogate: 2-Fluorophenol	4.82		mg/Kg wet	6.51		73.9	30-130			
Surrogate: Phenol-d6	4.94		mg/Kg wet	6.51		75.8	30-130			
Surrogate: Nitrobenzene-d5	2.34		mg/Kg wet	3.26		72.0	30-130			
Surrogate: 2-Fluorobiphenyl	2.39		mg/Kg wet	3.26		73.4	30-130			
Surrogate: 2,4,6-Tribromophenol	5.46		mg/Kg wet	6.51		83.9	30-130			
Surrogate: p-Terphenyl-d14	3.09		mg/Kg wet	3.26		94.7	30-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119880 - SW-846 3546

Blank (B119880-BLK1)

Prepared: 04/21/15 Analyzed: 04/23/15

alpha-Chlordane	ND	0.0050	mg/Kg wet							
alpha-Chlordane [2C]	ND	0.0050	mg/Kg wet							
gamma-Chlordane	ND	0.0050	mg/Kg wet							
gamma-Chlordane [2C]	ND	0.0050	mg/Kg wet							
Alachlor	ND	0.020	mg/Kg wet							
Alachlor [2C]	ND	0.020	mg/Kg wet							
Aldrin	ND	0.0050	mg/Kg wet							
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDT	ND	0.0040	mg/Kg wet							
4,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
Endosulfan I	ND	0.0050	mg/Kg wet							
Endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Aldehyde	ND	0.0080	mg/Kg wet							
Endrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
Heptachlor	ND	0.0050	mg/Kg wet							
Heptachlor [2C]	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Hexachlorobenzene	ND	0.0060	mg/Kg wet							
Hexachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
Methoxychlor	ND	0.050	mg/Kg wet							
Methoxychlor [2C]	ND	0.050	mg/Kg wet							
Toxaphene	ND	0.10	mg/Kg wet							
Toxaphene [2C]	ND	0.10	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.202		mg/Kg wet	0.200		101	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.186		mg/Kg wet	0.200		92.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.163		mg/Kg wet	0.200		81.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.160		mg/Kg wet	0.200		80.1	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119880 - SW-846 3546										
LCS (B119880-BS1)										
Prepared: 04/21/15 Analyzed: 04/23/15										
Alachlor	0.090	0.020	mg/Kg wet	0.100		90.1	40-140			
Alachlor [2C]	0.10	0.020	mg/Kg wet	0.100		103	40-140			
Aldrin	0.11	0.0050	mg/Kg wet	0.100		108	40-140			
Aldrin [2C]	0.11	0.0050	mg/Kg wet	0.100		106	40-140			
alpha-BHC	0.11	0.0050	mg/Kg wet	0.100		108	40-140			
alpha-BHC [2C]	0.11	0.0050	mg/Kg wet	0.100		106	40-140			
beta-BHC	0.10	0.0050	mg/Kg wet	0.100		100	40-140			
beta-BHC [2C]	0.099	0.0050	mg/Kg wet	0.100		98.8	40-140			
delta-BHC	0.10	0.0050	mg/Kg wet	0.100		102	40-140			
delta-BHC [2C]	0.10	0.0050	mg/Kg wet	0.100		102	40-140			
gamma-BHC (Lindane)	0.11	0.0020	mg/Kg wet	0.100		111	40-140			
gamma-BHC (Lindane) [2C]	0.11	0.0020	mg/Kg wet	0.100		109	40-140			
4,4'-DDD	0.11	0.0040	mg/Kg wet	0.100		110	40-140			
4,4'-DDD [2C]	0.10	0.0040	mg/Kg wet	0.100		105	40-140			
4,4'-DDE	0.11	0.0040	mg/Kg wet	0.100		110	40-140			
4,4'-DDE [2C]	0.10	0.0040	mg/Kg wet	0.100		104	40-140			
4,4'-DDT	0.11	0.0040	mg/Kg wet	0.100		114	40-140			
4,4'-DDT [2C]	0.11	0.0040	mg/Kg wet	0.100		111	40-140			
Dieldrin	0.11	0.0040	mg/Kg wet	0.100		107	40-140			
Dieldrin [2C]	0.10	0.0040	mg/Kg wet	0.100		101	40-140			
Endosulfan I	0.10	0.0050	mg/Kg wet	0.100		103	40-140			
Endosulfan I [2C]	0.10	0.0050	mg/Kg wet	0.100		102	40-140			
Endosulfan II	0.10	0.0080	mg/Kg wet	0.100		105	40-140			
Endosulfan II [2C]	0.10	0.0080	mg/Kg wet	0.100		104	40-140			
Endosulfan Sulfate	0.10	0.0080	mg/Kg wet	0.100		104	40-140			
Endosulfan Sulfate [2C]	0.10	0.0080	mg/Kg wet	0.100		103	40-140			
Endrin	0.094	0.0080	mg/Kg wet	0.100		94.0	40-140			
Endrin [2C]	0.096	0.0080	mg/Kg wet	0.100		95.7	40-140			
Endrin Aldehyde	0.10	0.0080	mg/Kg wet	0.100		100	40-140			
Endrin Aldehyde [2C]	0.098	0.0080	mg/Kg wet	0.100		98.0	40-140			
Endrin Ketone	0.11	0.0080	mg/Kg wet	0.100		106	40-140			
Endrin Ketone [2C]	0.11	0.0080	mg/Kg wet	0.100		109	40-140			
Heptachlor	0.10	0.0050	mg/Kg wet	0.100		104	40-140			
Heptachlor [2C]	0.11	0.0050	mg/Kg wet	0.100		107	40-140			
Heptachlor Epoxide	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
Heptachlor Epoxide [2C]	0.10	0.0050	mg/Kg wet	0.100		103	40-140			
Hexachlorobenzene	0.10	0.0060	mg/Kg wet	0.100		104	40-140			
Hexachlorobenzene [2C]	0.10	0.0060	mg/Kg wet	0.100		105	40-140			
Methoxychlor	0.099	0.050	mg/Kg wet	0.100		98.7	40-140			
Methoxychlor [2C]	0.097	0.050	mg/Kg wet	0.100		97.4	40-140			
Surrogate: Decachlorobiphenyl	0.207		mg/Kg wet	0.200		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.189		mg/Kg wet	0.200		94.6	30-150			
Surrogate: Tetrachloro-m-xylene	0.188		mg/Kg wet	0.200		94.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.187		mg/Kg wet	0.200		93.7	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119880 - SW-846 3546										
LCS Dup (B119880-BSD1)										
					Prepared: 04/21/15 Analyzed: 04/23/15					
Alachlor	0.083	0.020	mg/Kg wet	0.100		82.9	40-140	8.26	30	
Alachlor [2C]	0.094	0.020	mg/Kg wet	0.100		94.5	40-140	8.37	30	
Aldrin	0.099	0.0050	mg/Kg wet	0.100		99.2	40-140	8.80	30	
Aldrin [2C]	0.097	0.0050	mg/Kg wet	0.100		97.2	40-140	8.48	30	
alpha-BHC	0.10	0.0050	mg/Kg wet	0.100		99.6	40-140	8.22	30	
alpha-BHC [2C]	0.096	0.0050	mg/Kg wet	0.100		95.5	40-140	10.1	30	
beta-BHC	0.093	0.0050	mg/Kg wet	0.100		93.1	40-140	7.23	30	
beta-BHC [2C]	0.090	0.0050	mg/Kg wet	0.100		90.4	40-140	8.81	30	
delta-BHC	0.096	0.0050	mg/Kg wet	0.100		96.3	40-140	5.72	30	
delta-BHC [2C]	0.094	0.0050	mg/Kg wet	0.100		94.0	40-140	7.76	30	
gamma-BHC (Lindane)	0.10	0.0020	mg/Kg wet	0.100		102	40-140	8.22	30	
gamma-BHC (Lindane) [2C]	0.099	0.0020	mg/Kg wet	0.100		99.0	40-140	9.80	30	
4,4'-DDD	0.10	0.0040	mg/Kg wet	0.100		100	40-140	9.17	30	
4,4'-DDD [2C]	0.096	0.0040	mg/Kg wet	0.100		96.0	40-140	8.78	30	
4,4'-DDE	0.10	0.0040	mg/Kg wet	0.100		99.5	40-140	9.68	30	
4,4'-DDE [2C]	0.095	0.0040	mg/Kg wet	0.100		94.9	40-140	9.48	30	
4,4'-DDT	0.10	0.0040	mg/Kg wet	0.100		104	40-140	9.22	30	
4,4'-DDT [2C]	0.10	0.0040	mg/Kg wet	0.100		101	40-140	10.1	30	
Dieldrin	0.098	0.0040	mg/Kg wet	0.100		97.6	40-140	8.89	30	
Dieldrin [2C]	0.092	0.0040	mg/Kg wet	0.100		92.3	40-140	9.18	30	
Endosulfan I	0.094	0.0050	mg/Kg wet	0.100		94.1	40-140	8.97	30	
Endosulfan I [2C]	0.094	0.0050	mg/Kg wet	0.100		93.5	40-140	8.83	30	
Endosulfan II	0.096	0.0080	mg/Kg wet	0.100		96.0	40-140	8.81	30	
Endosulfan II [2C]	0.096	0.0080	mg/Kg wet	0.100		96.1	40-140	8.18	30	
Endosulfan Sulfate	0.096	0.0080	mg/Kg wet	0.100		96.1	40-140	7.66	30	
Endosulfan Sulfate [2C]	0.095	0.0080	mg/Kg wet	0.100		94.7	40-140	8.34	30	
Endrin	0.088	0.0080	mg/Kg wet	0.100		87.6	40-140	7.09	30	
Endrin [2C]	0.089	0.0080	mg/Kg wet	0.100		89.1	40-140	7.17	30	
Endrin Aldehyde	0.094	0.0080	mg/Kg wet	0.100		94.1	40-140	6.21	30	
Endrin Aldehyde [2C]	0.092	0.0080	mg/Kg wet	0.100		92.4	40-140	5.85	30	
Endrin Ketone	0.097	0.0080	mg/Kg wet	0.100		97.5	40-140	8.86	30	
Endrin Ketone [2C]	0.10	0.0080	mg/Kg wet	0.100		99.7	40-140	9.30	30	
Heptachlor	0.095	0.0050	mg/Kg wet	0.100		95.0	40-140	8.66	30	
Heptachlor [2C]	0.098	0.0050	mg/Kg wet	0.100		98.2	40-140	8.86	30	
Heptachlor Epoxide	0.093	0.0050	mg/Kg wet	0.100		92.7	40-140	8.92	30	
Heptachlor Epoxide [2C]	0.094	0.0050	mg/Kg wet	0.100		94.1	40-140	8.85	30	
Hexachlorobenzene	0.096	0.0060	mg/Kg wet	0.100		95.6	40-140	8.06	30	
Hexachlorobenzene [2C]	0.095	0.0060	mg/Kg wet	0.100		95.3	40-140	9.31	30	
Methoxychlor	0.094	0.050	mg/Kg wet	0.100		94.4	40-140	4.47	30	
Methoxychlor [2C]	0.093	0.050	mg/Kg wet	0.100		92.6	40-140	5.10	30	
Surrogate: Decachlorobiphenyl	0.181		mg/Kg wet	0.200		90.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.166		mg/Kg wet	0.200		82.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.170		mg/Kg wet	0.200		84.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.165		mg/Kg wet	0.200		82.7	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119881 - SW-846 3546										
Blank (B119881-BLK1)										
Prepared: 04/21/15 Analyzed: 04/24/15										
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.167		mg/Kg wet	0.200		83.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.149		mg/Kg wet	0.200		74.6	30-150			
Surrogate: Tetrachloro-m-xylene	0.150		mg/Kg wet	0.200		75.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.157		mg/Kg wet	0.200		78.5	30-150			
LCS (B119881-BS1)										
Prepared: 04/21/15 Analyzed: 04/24/15										
Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		95.2	40-140			
Aroclor-1016 [2C]	0.20	0.10	mg/Kg wet	0.200		101	40-140			
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		94.4	40-140			
Aroclor-1260 [2C]	0.20	0.10	mg/Kg wet	0.200		98.0	40-140			
Surrogate: Decachlorobiphenyl	0.181		mg/Kg wet	0.200		90.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.164		mg/Kg wet	0.200		81.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.189		mg/Kg wet	0.200		94.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.201		mg/Kg wet	0.200		101	30-150			
LCS Dup (B119881-BSD1)										
Prepared: 04/21/15 Analyzed: 04/24/15										
Aroclor-1016	0.23	0.10	mg/Kg wet	0.200		113	40-140	17.3	30	
Aroclor-1016 [2C]	0.24	0.10	mg/Kg wet	0.200		119	40-140	16.3	30	
Aroclor-1260	0.23	0.10	mg/Kg wet	0.200		115	40-140	19.8	30	
Aroclor-1260 [2C]	0.24	0.10	mg/Kg wet	0.200		120	40-140	19.8	30	
Surrogate: Decachlorobiphenyl	0.230		mg/Kg wet	0.200		115	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.208		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	0.215		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.228		mg/Kg wet	0.200		114	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B120042 - SW-846 3510C										
Blank (B120042-BLK1)										
Prepared: 04/23/15 Analyzed: 04/24/15										
Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	1.84		µg/L	2.00		92.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.74		µg/L	2.00		87.1	30-150			
Surrogate: Tetrachloro-m-xylene	1.77		µg/L	2.00		88.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.83		µg/L	2.00		91.7	30-150			
LCS (B120042-BS1)										
Prepared: 04/23/15 Analyzed: 04/24/15										
Aroclor-1016	0.46	0.20	µg/L	0.500		91.2	50-114			
Aroclor-1016 [2C]	0.46	0.20	µg/L	0.500		91.2	50-114			
Aroclor-1260	0.46	0.20	µg/L	0.500		92.3	8-127			
Aroclor-1260 [2C]	0.46	0.20	µg/L	0.500		92.7	8-127			
Surrogate: Decachlorobiphenyl	1.85		µg/L	2.00		92.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.73		µg/L	2.00		86.6	30-150			
Surrogate: Tetrachloro-m-xylene	1.64		µg/L	2.00		82.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.70		µg/L	2.00		84.9	30-150			
LCS Dup (B120042-BSD1)										
Prepared: 04/23/15 Analyzed: 04/24/15										
Aroclor-1016	0.51	0.20	µg/L	0.500		103	50-114	12.1		
Aroclor-1016 [2C]	0.49	0.20	µg/L	0.500		98.6	50-114	7.77		
Aroclor-1260	0.51	0.20	µg/L	0.500		102	8-127	9.72		
Aroclor-1260 [2C]	0.51	0.20	µg/L	0.500		101	8-127	9.03		
Surrogate: Decachlorobiphenyl	1.87		µg/L	2.00		93.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.77		µg/L	2.00		88.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.81		µg/L	2.00		90.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.86		µg/L	2.00		93.2	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119785 - SW-846 8151

Blank (B119785-BLK1)

Prepared: 04/21/15 Analyzed: 04/24/15

2,4-D	ND	24	µg/kg wet							
2,4-D [2C]	ND	24	µg/kg wet							
2,4-DB	ND	24	µg/kg wet							
2,4-DB [2C]	ND	24	µg/kg wet							
2,4,5-TP (Silvex)	ND	2.4	µg/kg wet							
2,4,5-TP (Silvex) [2C]	ND	2.4	µg/kg wet							
2,4,5-T	ND	2.4	µg/kg wet							
2,4,5-T [2C]	ND	2.4	µg/kg wet							
Dalapon	ND	60	µg/kg wet							
Dalapon [2C]	ND	60	µg/kg wet							
Dicamba	ND	2.4	µg/kg wet							
Dicamba [2C]	ND	2.4	µg/kg wet							
Dichloroprop	ND	24	µg/kg wet							
Dichloroprop [2C]	ND	24	µg/kg wet							
Dinoseb	ND	12	µg/kg wet							
Dinoseb [2C]	ND	12	µg/kg wet							
MCPA	ND	2400	µg/kg wet							
MCPA [2C]	ND	2400	µg/kg wet							
MCPP	ND	2400	µg/kg wet							
MCPP [2C]	ND	2400	µg/kg wet							
Surrogate: 2,4-Dichlorophenylacetic acid	74.4		µg/kg wet	95.2		78.1	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	72.6		µg/kg wet	95.2		76.2	30-150			

LCS (B119785-BS1)

Prepared: 04/21/15 Analyzed: 04/24/15

2,4-D	98.0	25	µg/kg wet	124		78.8	40-140			
2,4-D [2C]	87.9	25	µg/kg wet	124		70.7	40-140			
2,4-DB	96.1	25	µg/kg wet	124		77.2	40-140			
2,4-DB [2C]	97.1	25	µg/kg wet	124		78.1	40-140			
2,4,5-TP (Silvex)	10.0	2.5	µg/kg wet	12.4		80.5	40-140			
2,4,5-TP (Silvex) [2C]	10.0	2.5	µg/kg wet	12.4		80.5	40-140			
2,4,5-T	9.36	2.5	µg/kg wet	12.4		75.3	40-140			
2,4,5-T [2C]	9.75	2.5	µg/kg wet	12.4		78.4	40-140			
Dalapon	132	62	µg/kg wet	311		42.5	40-140			
Dalapon [2C]	131	62	µg/kg wet	311		42.2	40-140			
Dicamba	9.98	2.5	µg/kg wet	12.4		80.3	40-140			
Dicamba [2C]	10.8	2.5	µg/kg wet	12.4		87.0	40-140			
Dichloroprop	120	25	µg/kg wet	124		96.5	40-140			
Dichloroprop [2C]	121	25	µg/kg wet	124		96.9	40-140			
Dinoseb	13.5	12	µg/kg wet	62.2		21.7	0-42.4			
Dinoseb [2C]	13.8	12	µg/kg wet	62.2		22.2	0-41.1			
MCPA	9510	2500	µg/kg wet	12400		76.5	40-140			
MCPA [2C]	9480	2500	µg/kg wet	12400		76.2	40-140			
MCPP	13700	2500	µg/kg wet	12400		110	40-140			
MCPP [2C]	9490	2500	µg/kg wet	12400		76.3	40-140			
Surrogate: 2,4-Dichlorophenylacetic acid	78.1		µg/kg wet	99.5		78.5	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	74.8		µg/kg wet	99.5		75.2	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119785 - SW-846 8151										
LCS Dup (B119785-BSD1)										
					Prepared: 04/21/15 Analyzed: 04/24/15					
2,4-D	105	25	µg/kg wet	124		84.4	40-140	6.85	30	
2,4-D [2C]	94.6	25	µg/kg wet	124		76.1	40-140	7.31	30	
2,4-DB	103	25	µg/kg wet	124		82.8	40-140	7.01	30	
2,4-DB [2C]	105	25	µg/kg wet	124		84.2	40-140	7.59	30	
2,4,5-TP (Silvex)	10.3	2.5	µg/kg wet	12.4		83.2	40-140	3.27	30	
2,4,5-TP (Silvex) [2C]	10.5	2.5	µg/kg wet	12.4		84.5	40-140	4.86	30	
2,4,5-T	9.90	2.5	µg/kg wet	12.4		79.6	40-140	5.56	30	
2,4,5-T [2C]	10.3	2.5	µg/kg wet	12.4		83.0	40-140	5.75	30	
Dalapon	138	62	µg/kg wet	311		44.3	40-140	4.20	30	
Dalapon [2C]	138	62	µg/kg wet	311		44.2	40-140	4.57	30	
Dicamba	10.7	2.5	µg/kg wet	12.4		85.9	40-140	6.79	30	
Dicamba [2C]	11.9	2.5	µg/kg wet	12.4		95.4	40-140	9.24	30	
Dichloroprop	127	25	µg/kg wet	124		102	40-140	5.87	30	
Dichloroprop [2C]	128	25	µg/kg wet	124		103	40-140	5.83	30	
Dinoseb	10.3	12	µg/kg wet	62.2		16.6	0-42.4	26.7	30	
Dinoseb [2C]	10.7	12	µg/kg wet	62.2		17.1	0-41.1	25.7	30	
MCPA	10100	2500	µg/kg wet	12400		81.0	40-140	5.80	30	
MCPA [2C]	9940	2500	µg/kg wet	12400		79.9	40-140	4.68	30	
MCPP	15300	2500	µg/kg wet	12400		123	40-140	10.8	30	
MCPP [2C]	9880	2500	µg/kg wet	12400		79.4	40-140	4.04	30	
Surrogate: 2,4-Dichlorophenylacetic acid	86.4		µg/kg wet	99.5		86.8	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	81.8		µg/kg wet	99.5		82.3	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119724 - SW-846 5035/5030B										
Blank (B119724-BLK1)										
Prepared: 04/20/15 Analyzed: 04/21/15										
Gasoline Range Organics (GRO)	ND	1.0	mg/Kg wet							
Surrogate: 1-Chloro-3-fluorobenzene	0.0156		mg/Kg wet	0.0150		104	70-130			
LCS (B119724-BS1)										
Prepared: 04/20/15 Analyzed: 04/21/15										
Gasoline Range Organics (GRO)	0.226	0.010	mg/Kg wet	0.250		90.4	80-120			
Surrogate: 1-Chloro-3-fluorobenzene	0.0158		mg/Kg wet	0.0150		105	70-130			
LCS Dup (B119724-BSD1)										
Prepared: 04/20/15 Analyzed: 04/21/15										
Gasoline Range Organics (GRO)	0.228	0.010	mg/Kg wet	0.250		91.2	80-120	0.889	30	
Surrogate: 1-Chloro-3-fluorobenzene	0.0157		mg/Kg wet	0.0150		105	70-130			
Batch B119936 - SW-846 3546										
Blank (B119936-BLK1)										
Prepared: 04/22/15 Analyzed: 04/23/15										
Diesel Range Organics	ND	8.3	mg/Kg wet							
Surrogate: o-Terphenyl	2.68		mg/Kg wet	3.33		80.5	40-140			
LCS (B119936-BS1)										
Prepared: 04/22/15 Analyzed: 04/23/15										
Diesel Range Organics	20.8	8.3	mg/Kg wet	33.3		62.5	40-140			
Surrogate: o-Terphenyl	2.54		mg/Kg wet	3.33		76.1	40-140			
LCS Dup (B119936-BSD1)										
Prepared: 04/22/15 Analyzed: 04/23/15										
Diesel Range Organics	21.6	8.3	mg/Kg wet	33.3		64.9	40-140	3.70		
Surrogate: o-Terphenyl	2.46		mg/Kg wet	3.33		73.9	40-140			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119808 - SW-846 7470A Prep										
Blank (B119808-BLK1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Mercury	ND	0.00010	mg/L							
LCS (B119808-BS1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Mercury	0.00180	0.00010	mg/L	0.00200		90.2	80-120			
LCS Dup (B119808-BSD1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Mercury	0.00181	0.00010	mg/L	0.00200		90.6	80-120	0.463	20	
Duplicate (B119808-DUP1)				Source: 15D0889-10			Prepared: 04/21/15 Analyzed: 04/22/15			
Mercury	0.000127	0.00010	mg/L		0.000122			3.82	20	
Matrix Spike (B119808-MS1)				Source: 15D0889-10			Prepared: 04/21/15 Analyzed: 04/22/15			
Mercury	0.00186	0.00010	mg/L	0.00200	0.000122	87.1	75-125			
Batch B119915 - SW-846 7471										
Blank (B119915-BLK1)				Prepared: 04/22/15 Analyzed: 04/24/15						
Mercury	ND	0.025	mg/Kg wet							
LCS (B119915-BS1)				Prepared: 04/22/15 Analyzed: 04/24/15						
Mercury	7.45	0.75	mg/Kg wet	7.10		105	73.7-126.3			
LCS Dup (B119915-BSD1)				Prepared: 04/22/15 Analyzed: 04/24/15						
Mercury	7.79	0.76	mg/Kg wet	7.10		110	73.7-126.3	4.40	30	
Batch B119951 - SW-846 3050B										
Blank (B119951-BLK1)				Prepared: 04/22/15 Analyzed: 04/23/15						
Aluminum	ND	2.5	mg/Kg wet							
Antimony	ND	2.5	mg/Kg wet							
Arsenic	ND	2.5	mg/Kg wet							
Barium	ND	2.5	mg/Kg wet							
Beryllium	ND	0.25	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Calcium	ND	7.5	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Cobalt	ND	2.5	mg/Kg wet							
Copper	6.3	0.50	mg/Kg wet							B
Iron	ND	2.5	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Magnesium	ND	7.5	mg/Kg wet							
Manganese	ND	0.50	mg/Kg wet							
Nickel	ND	0.50	mg/Kg wet							
Potassium	ND	100	mg/Kg wet							
Selenium	ND	5.0	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							
Sodium	ND	100	mg/Kg wet							
Thallium	ND	2.5	mg/Kg wet							
Vanadium	ND	1.0	mg/Kg wet							
Zinc	3.6	1.0	mg/Kg wet							B

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119951 - SW-846 3050B										
LCS (B119951-BS1)										
					Prepared: 04/22/15 Analyzed: 04/23/15					
Aluminum	7030	4.9	mg/Kg wet	8100		86.8	51.2-148.1			
Antimony	113	4.9	mg/Kg wet	116		97.3	0-210.3			
Arsenic	122	4.9	mg/Kg wet	122		100	77.8-122.1			
Barium	169	4.9	mg/Kg wet	167		101	82-117.4			
Beryllium	60.2	0.49	mg/Kg wet	54.3		111	82.3-117.7			
Cadmium	90.8	0.49	mg/Kg wet	88.0		103	81.9-118.2			
Calcium	5890	15	mg/Kg wet	5920		99.5	81.9-118.2			
Chromium	104	0.98	mg/Kg wet	102		102	78.7-120.6			
Cobalt	101	4.9	mg/Kg wet	99.4		102	83-116.7			
Copper	75.2	0.98	mg/Kg wet	78.0		96.4	80.4-119.6			B
Iron	13800	4.9	mg/Kg wet	15100		91.5	46.8-153			
Lead	90.3	1.5	mg/Kg wet	94.5		95.6	82.4-117.8			
Magnesium	3120	15	mg/Kg wet	3020		103	75.5-124.2			
Manganese	420	0.98	mg/Kg wet	401		105	80.8-119.2			
Nickel	55.2	0.98	mg/Kg wet	56.3		98.1	82.2-117.8			
Potassium	2640	200	mg/Kg wet	2490		106	69.9-130.1			
Selenium	161	9.8	mg/Kg wet	157		103	77.1-122.3			
Silver	31.4	0.98	mg/Kg wet	34.2		91.7	74.3-125.4			
Sodium	239	200	mg/Kg wet	246		97.3	69.9-130.5			
Thallium	115	4.9	mg/Kg wet	116		98.8	78.2-121.6			
Vanadium	71.3	2.0	mg/Kg wet	67.1		106	64.8-135.2			
Zinc	211	2.0	mg/Kg wet	207		102	79.7-120.8			B
LCS Dup (B119951-BSD1)										
					Prepared: 04/22/15 Analyzed: 04/23/15					
Aluminum	6990	5.1	mg/Kg wet	8100		86.3	51.2-148.1	0.629	30	
Antimony	112	5.1	mg/Kg wet	116		96.8	0-210.3	0.486	30	
Arsenic	127	5.1	mg/Kg wet	122		104	77.8-122.1	3.67	30	
Barium	171	5.1	mg/Kg wet	167		102	82-117.4	0.985	30	
Beryllium	62.0	0.51	mg/Kg wet	54.3		114	82.3-117.7	2.90	30	
Cadmium	91.6	0.51	mg/Kg wet	88.0		104	81.9-118.2	0.958	30	
Calcium	6010	15	mg/Kg wet	5920		102	81.9-118.2	2.01	30	
Chromium	104	1.0	mg/Kg wet	102		102	78.7-120.6	0.0679	30	
Cobalt	102	5.1	mg/Kg wet	99.4		103	83-116.7	0.556	30	
Copper	75.8	1.0	mg/Kg wet	78.0		97.2	80.4-119.6	0.774	30	B
Iron	13600	5.1	mg/Kg wet	15100		90.1	46.8-153	1.56	30	
Lead	92.2	1.5	mg/Kg wet	94.5		97.6	82.4-117.8	2.08	30	
Magnesium	3100	15	mg/Kg wet	3020		103	75.5-124.2	0.680	30	
Manganese	431	1.0	mg/Kg wet	401		107	80.8-119.2	2.40	30	
Nickel	55.8	1.0	mg/Kg wet	56.3		99.0	82.2-117.8	0.927	30	
Potassium	2610	200	mg/Kg wet	2490		105	69.9-130.1	1.34	30	
Selenium	166	10	mg/Kg wet	157		105	77.1-122.3	2.86	30	
Silver	30.9	1.0	mg/Kg wet	34.2		90.4	74.3-125.4	1.50	30	
Sodium	244	200	mg/Kg wet	246		99.3	69.9-130.5	2.01	30	
Thallium	115	5.1	mg/Kg wet	116		98.8	78.2-121.6	0.0219	30	
Vanadium	69.6	2.0	mg/Kg wet	67.1		104	64.8-135.2	2.34	30	
Zinc	214	2.0	mg/Kg wet	207		103	79.7-120.8	1.30	30	B

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119951 - SW-846 3050B										
MRL Check (B119951-MRL1)					Prepared: 04/22/15 Analyzed: 04/23/15					
Lead	0.902	0.72	mg/Kg wet	0.724		125 *	80-120			L-10
Batch B120002 - SW-846 3005A										
Blank (B120002-BLK1)					Prepared: 04/22/15 Analyzed: 04/24/15					
Cadmium	ND	0.0040	mg/L							
Copper	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Zinc	ND	0.020	mg/L							
LCS (B120002-BS1)					Prepared: 04/22/15 Analyzed: 04/24/15					
Cadmium	0.517	0.0040	mg/L	0.500		103	80-120			
Copper	0.470	0.010	mg/L	0.500		94.1	80-120			
Lead	0.498	0.010	mg/L	0.500		99.6	80-120			
Nickel	0.505	0.010	mg/L	0.500		101	80-120			
Zinc	0.512	0.020	mg/L	0.500		102	80-120			
LCS Dup (B120002-BSD1)					Prepared: 04/22/15 Analyzed: 04/24/15					
Cadmium	0.514	0.0040	mg/L	0.500		103	80-120	0.562	20	
Copper	0.468	0.010	mg/L	0.500		93.7	80-120	0.414	20	
Lead	0.488	0.010	mg/L	0.500		97.7	80-120	1.92	20	
Nickel	0.501	0.010	mg/L	0.500		100	80-120	0.855	20	
Zinc	0.508	0.020	mg/L	0.500		102	80-120	0.801	20	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119641 - SW-846 7196A										
Blank (B119641-BLK1)				Prepared & Analyzed: 04/17/15						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B119641-BS1)				Prepared & Analyzed: 04/17/15						
Hexavalent Chromium	0.098	0.0040	mg/L	0.100		97.9	80-120			
LCS Dup (B119641-BSD1)				Prepared & Analyzed: 04/17/15						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		100	80-120	2.46	20	
Duplicate (B119641-DUP1)				Source: 15D0889-11		Prepared & Analyzed: 04/17/15				
Hexavalent Chromium	ND	0.0040	mg/L		ND			NC	20	
Matrix Spike (B119641-MS1)				Source: 15D0889-11		Prepared & Analyzed: 04/17/15				
Hexavalent Chromium	0.066	0.0040	mg/L	0.100	ND	66.2	* 75-125			MS-07A
Matrix Spike Dup (B119641-MSD1)				Source: 15D0889-11		Prepared & Analyzed: 04/17/15				
Hexavalent Chromium	0.067	0.0040	mg/L	0.100	ND	67.4	* 75-125	1.82	20	MS-07A
Batch B119662 - SW-846 9045C										
LCS (B119662-BS1)				Prepared & Analyzed: 04/18/15						
pH	6.03		pH Units	6.00		100	98.6-102			
LCS (B119662-BS2)				Prepared & Analyzed: 04/18/15						
pH	6.01		pH Units	6.00		100	98.6-102			
Batch B119663 - SM21-22 4500 H B										
LCS (B119663-BS1)				Prepared & Analyzed: 04/18/15						
pH	6.05		pH Units	6.00		101	98.7-102			
Batch B119709 - SM21-22 2540D										
Blank (B119709-BLK1)				Prepared & Analyzed: 04/20/15						
Total Suspended Solids	ND	2.5	mg/L							
LCS (B119709-BS1)				Prepared & Analyzed: 04/20/15						
Total Suspended Solids	204	10	mg/L	200		102	70.4-114			
Batch B119811 - EPA 1664B										
Blank (B119811-BLK1)				Prepared & Analyzed: 04/21/15						
Silica Gel Treated HEM (SGT-HEM)	ND	1.4	mg/L							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119811 - EPA 1664B										
LCS (B119811-BS1)				Prepared & Analyzed: 04/21/15						
Silica Gel Treated HEM (SGT-HEM)	21		mg/L	20.0		104	64-132			
Batch B119852 - SW-846 9014										
Blank (B119852-BLK1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B119852-BS1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Reactive Cyanide	9.5	0.40	mg/Kg	10.0		95.4	86.4-107			
Batch B119853 - SW-846 9030A										
Blank (B119853-BLK1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B119853-BS1)				Prepared: 04/21/15 Analyzed: 04/22/15						
Reactive Sulfide	15	2.0	mg/Kg	14.8		103	42.9-132			
Batch B119877 - SM21-22 2540B										
Blank (B119877-BLK1)				Prepared & Analyzed: 04/21/15						
Total Solids	ND	10	mg/L							
LCS (B119877-BS1)				Prepared & Analyzed: 04/21/15						
Total Solids	192	10	mg/L	200		96.0	66.4-127			
Batch B119900 - EPA 420.1										
Blank (B119900-BLK1)				Prepared: 04/23/15 Analyzed: 04/24/15						
Phenol	ND	0.050	mg/L							
LCS (B119900-BS1)				Prepared: 04/23/15 Analyzed: 04/24/15						
Phenol	0.50	0.050	mg/L	0.500		100	76.6-128			
LCS Dup (B119900-BSD1)				Prepared: 04/23/15 Analyzed: 04/24/15						
Phenol	0.50	0.050	mg/L	0.500		100	76.6-128	0.00	9.7	
Reference (B119900-SRM1)				Prepared: 04/23/15 Analyzed: 04/24/15						
Phenol	0.524	0.050	mg/L	0.500		105	0-200			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B119917 - SM19-22 4500-N Org B,C-NH3 C										
Blank (B119917-BLK1)				Prepared: 04/22/15 Analyzed: 04/23/15						
Total Kjeldahl Nitrogen	ND	1.0	mg/L							
LCS (B119917-BS1)				Prepared: 04/22/15 Analyzed: 04/23/15						
Total Kjeldahl Nitrogen	19	1.0	mg/L	20.0		94.1	81.5-111			
Batch B119996 - SM 21-22 4500 NO3 F										
Blank (B119996-BLK1)				Prepared & Analyzed: 04/22/15						
Nitrate/Nitrite as N	ND	0.050	mg/L							
LCS (B119996-BS1)				Prepared & Analyzed: 04/22/15						
Nitrate/Nitrite as N	2.2		mg/L	2.38		92.4	90.7-110			
LCS Dup (B119996-BSD1)				Prepared & Analyzed: 04/22/15						
Nitrate/Nitrite as N	2.3		mg/L	2.38		96.2	90.7-110	4.01	4.59	
Batch B120016 - SM21-22 4500 CL B										
Blank (B120016-BLK1)				Prepared & Analyzed: 04/22/15						
Chloride	ND	1.0	mg/L							
LCS (B120016-BS1)				Prepared & Analyzed: 04/22/15						
Chloride	12	1.0	mg/L	11.8		105	87.1-113			
LCS Dup (B120016-BSD1)				Prepared & Analyzed: 04/22/15						
Chloride	12	1.0	mg/L	11.8		105	87.1-113	0.00	9.72	
Batch B120041 - % Solids										
Duplicate (B120041-DUP5)		Source: 15D0889-01			Prepared: 04/23/15 Analyzed: 04/24/15					
% Solids	92.6		% Wt			91.0		1.74	20	
Batch B120132 - SW-846 1010										
Blank (B120132-BLK1)				Prepared & Analyzed: 04/23/15						
Flashpoint	> 212 °F		°F							
LCS (B120132-BS1)				Prepared & Analyzed: 04/23/15						
Flashpoint	81		°F	81.0		99.4	98.8-101			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B120132 - SW-846 1010										
LCS Dup (B120132-BSD1)				Prepared & Analyzed: 04/23/15						
Flashpoint	81		°F	81.0		99.4	98.8-101	0.00	0.0158	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

TCLP - Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B119952 - SW-846 5030B

Blank (B119952-BLK1)

Prepared & Analyzed: 04/22/15

Benzene	ND	0.010	mg/L							
2-Butanone (MEK)	ND	0.20	mg/L							
Carbon Tetrachloride	ND	0.050	mg/L							
Chlorobenzene	ND	0.010	mg/L							
Chloroform	ND	0.020	mg/L							
1,4-Dichlorobenzene	ND	0.010	mg/L							
1,2-Dichloroethane	ND	0.010	mg/L							
1,1-Dichloroethylene	ND	0.010	mg/L							
Tetrachloroethylene	ND	0.010	mg/L							
Trichloroethylene	ND	0.010	mg/L							
Vinyl Chloride	ND	0.020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	0.0287		mg/L	0.0250		115	70-130			
Surrogate: Toluene-d8	0.0247		mg/L	0.0250		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.0234		mg/L	0.0250		93.6	70-130			

LCS (B119952-BS1)

Prepared & Analyzed: 04/22/15

Benzene	0.0113	0.0010	mg/L	0.0100		113	70-130			
2-Butanone (MEK)	0.153	0.020	mg/L	0.100		153	40-160			†
Carbon Tetrachloride	0.00966	0.0050	mg/L	0.0100		96.6	70-130			
Chlorobenzene	0.00923	0.0010	mg/L	0.0100		92.3	70-130			
Chloroform	0.0103	0.0020	mg/L	0.0100		103	70-130			
1,4-Dichlorobenzene	0.00963	0.0010	mg/L	0.0100		96.3	70-130			
1,2-Dichloroethane	0.00973	0.0010	mg/L	0.0100		97.3	70-130			
1,1-Dichloroethylene	0.0106	0.0010	mg/L	0.0100		106	70-130			
Tetrachloroethylene	0.00901	0.0010	mg/L	0.0100		90.1	70-130			
Trichloroethylene	0.00936	0.0010	mg/L	0.0100		93.6	70-130			
Vinyl Chloride	0.00977	0.0020	mg/L	0.0100		97.7	40-160			†
Surrogate: 1,2-Dichloroethane-d4	0.0294		mg/L	0.0250		118	70-130			
Surrogate: Toluene-d8	0.0239		mg/L	0.0250		95.5	70-130			
Surrogate: 4-Bromofluorobenzene	0.0241		mg/L	0.0250		96.4	70-130			

LCS Dup (B119952-BSD1)

Prepared & Analyzed: 04/22/15

Benzene	0.0110	0.0010	mg/L	0.0100		110	70-130	2.86	25	
2-Butanone (MEK)	0.145	0.020	mg/L	0.100		145	40-160	5.44	25	†
Carbon Tetrachloride	0.00904	0.0050	mg/L	0.0100		90.4	70-130	6.63	25	
Chlorobenzene	0.00917	0.0010	mg/L	0.0100		91.7	70-130	0.652	25	
Chloroform	0.00969	0.0020	mg/L	0.0100		96.9	70-130	5.91	25	
1,4-Dichlorobenzene	0.00942	0.0010	mg/L	0.0100		94.2	70-130	2.20	25	
1,2-Dichloroethane	0.0101	0.0010	mg/L	0.0100		101	70-130	3.43	25	
1,1-Dichloroethylene	0.0102	0.0010	mg/L	0.0100		102	70-130	4.53	25	
Tetrachloroethylene	0.00878	0.0010	mg/L	0.0100		87.8	70-130	2.59	25	
Trichloroethylene	0.00916	0.0010	mg/L	0.0100		91.6	70-130	2.16	25	
Vinyl Chloride	0.00915	0.0020	mg/L	0.0100		91.5	40-160	6.55	25	†
Surrogate: 1,2-Dichloroethane-d4	0.0291		mg/L	0.0250		117	70-130			
Surrogate: Toluene-d8	0.0247		mg/L	0.0250		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.0237		mg/L	0.0250		94.8	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

TCLP - Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B120157 - SW-846 3510C

Blank (B120157-BLK1)

Prepared: 04/24/15 Analyzed: 04/27/15

2,4-Dinitrotoluene	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.050	mg/L							
Pyridine	ND	0.025	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
Surrogate: 2-Fluorophenol	0.688		mg/L	1.00		68.8	15-110			
Surrogate: Phenol-d6	0.600		mg/L	1.00		60.0	15-110			
Surrogate: Nitrobenzene-d5	0.397		mg/L	0.500		79.4	30-130			
Surrogate: 2-Fluorobiphenyl	0.399		mg/L	0.500		79.8	30-130			
Surrogate: 2,4,6-Tribromophenol	0.908		mg/L	1.00		90.8	15-110			
Surrogate: p-Terphenyl-d14	0.417		mg/L	0.500		83.4	30-130			

LCS (B120157-BS1)

Prepared: 04/24/15 Analyzed: 04/27/15

2,4-Dinitrotoluene	0.257	0.050	mg/L	0.250		103	40-140			
Hexachlorobenzene	0.248	0.050	mg/L	0.250		99.1	40-140			
Hexachlorobutadiene	0.224	0.050	mg/L	0.250		89.4	40-140			
Hexachloroethane	0.210	0.050	mg/L	0.250		84.0	40-140			
2-Methylphenol	0.239	0.050	mg/L	0.250		95.6	30-130			
3/4-Methylphenol	0.241	0.050	mg/L	0.250		96.4	30-130			
Nitrobenzene	0.238	0.050	mg/L	0.250		95.0	40-140			
Pentachlorophenol	0.251	0.050	mg/L	0.250		100	30-130			
Pyridine	0.152	0.025	mg/L	0.250		61.0	10-140			†
2,4,5-Trichlorophenol	0.259	0.050	mg/L	0.250		104	30-130			
2,4,6-Trichlorophenol	0.244	0.050	mg/L	0.250		97.4	30-130			
Surrogate: 2-Fluorophenol	0.821		mg/L	1.00		82.1	15-110			
Surrogate: Phenol-d6	0.787		mg/L	1.00		78.7	15-110			
Surrogate: Nitrobenzene-d5	0.472		mg/L	0.500		94.5	30-130			
Surrogate: 2-Fluorobiphenyl	0.475		mg/L	0.500		95.0	30-130			
Surrogate: 2,4,6-Tribromophenol	1.06		mg/L	1.00		106	15-110			
Surrogate: p-Terphenyl-d14	0.539		mg/L	0.500		108	30-130			

Matrix Spike (B120157-MS1)

Source: 15D0889-09

Prepared: 04/24/15 Analyzed: 04/27/15

2,4-Dinitrotoluene	0.232	0.050	mg/L	0.250	ND	92.8	40-140			
Hexachlorobenzene	0.229	0.050	mg/L	0.250	ND	91.5	40-140			
Hexachlorobutadiene	0.204	0.050	mg/L	0.250	ND	81.5	40-140			
Hexachloroethane	0.196	0.050	mg/L	0.250	ND	78.4	40-140			
2-Methylphenol	0.213	0.050	mg/L	0.250	ND	85.1	40-140			
3/4-Methylphenol	0.207	0.050	mg/L	0.250	ND	82.7	40-140			
Nitrobenzene	0.209	0.050	mg/L	0.250	ND	83.6	40-140			
Pentachlorophenol	0.229	0.050	mg/L	0.250	ND	91.8	40-140			
Pyridine	0.178	0.025	mg/L	0.250	ND	71.1	40-140			
2,4,5-Trichlorophenol	0.228	0.050	mg/L	0.250	ND	91.1	40-140			
2,4,6-Trichlorophenol	0.217	0.050	mg/L	0.250	ND	86.8	40-140			
Surrogate: 2-Fluorophenol	0.731		mg/L	1.00		73.1	15-110			
Surrogate: Phenol-d6	0.662		mg/L	1.00		66.2	15-110			
Surrogate: Nitrobenzene-d5	0.417		mg/L	0.500		83.4	30-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

TCLP - Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B120157 - SW-846 3510C

Matrix Spike (B120157-MS1)

Source: 15D0889-09

Prepared: 04/24/15 Analyzed: 04/27/15

Surrogate: 2-Fluorobiphenyl	0.437		mg/L	0.500		87.3	30-130			
Surrogate: 2,4,6-Tribromophenol	0.954		mg/L	1.00		95.4	15-110			
Surrogate: p-Terphenyl-d14	0.466		mg/L	0.500		93.3	30-130			

QUALITY CONTROL

TCLP - Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B120154 - SW-846 3510C										
Blank (B120154-BLK1)										
Prepared: 04/24/15 Analyzed: 04/25/15										
gamma-BHC (Lindane)	ND	0.030	µg/L							
gamma-BHC (Lindane) [2C]	ND	0.030	µg/L							
Chlordane	ND	0.20	µg/L							
Chlordane [2C]	ND	0.20	µg/L							
Endrin	ND	0.080	µg/L							
Endrin [2C]	ND	0.080	µg/L							
Heptachlor	ND	0.050	µg/L							
Heptachlor [2C]	ND	0.050	µg/L							
Heptachlor Epoxide	ND	0.050	µg/L							
Heptachlor Epoxide [2C]	ND	0.050	µg/L							
Methoxychlor	ND	0.50	µg/L							
Methoxychlor [2C]	ND	0.50	µg/L							
Toxaphene	ND	1.0	µg/L							
Toxaphene [2C]	ND	1.0	µg/L							
Surrogate: Decachlorobiphenyl	2.00		µg/L	2.00		99.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.85		µg/L	2.00		92.7	30-150			
Surrogate: Tetrachloro-m-xylene	1.44		µg/L	2.00		72.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.36		µg/L	2.00		67.8	30-150			
LCS (B120154-BS1)										
Prepared: 04/24/15 Analyzed: 04/25/15										
gamma-BHC (Lindane)	1.2	0.030	µg/L	1.00		119	40-140			
gamma-BHC (Lindane) [2C]	1.2	0.030	µg/L	1.00		119	40-140			
Endrin	1.1	0.080	µg/L	1.00		114	40-140			
Endrin [2C]	1.1	0.080	µg/L	1.00		115	40-140			
Heptachlor	0.94	0.050	µg/L	1.00		93.9	40-140			
Heptachlor [2C]	1.0	0.050	µg/L	1.00		101	40-140			
Heptachlor Epoxide	1.1	0.050	µg/L	1.00		109	40-140			
Heptachlor Epoxide [2C]	1.1	0.050	µg/L	1.00		110	40-140			
Methoxychlor	1.2	0.50	µg/L	1.00		117	40-140			
Methoxychlor [2C]	1.2	0.50	µg/L	1.00		121	40-140			
Surrogate: Decachlorobiphenyl	2.05		µg/L	2.00		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.88		µg/L	2.00		94.0	30-150			
Surrogate: Tetrachloro-m-xylene	1.50		µg/L	2.00		74.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.35		µg/L	2.00		67.7	30-150			
Matrix Spike (B120154-MS1)										
Source: 15D0889-09 Prepared: 04/24/15 Analyzed: 04/25/15										
gamma-BHC (Lindane)	1.1	0.030	µg/L	1.00	ND	111	0-200			
gamma-BHC (Lindane) [2C]	1.1	0.030	µg/L	1.00	ND	114	0-200			
Endrin	1.1	0.080	µg/L	1.00	ND	110	0-200			
Endrin [2C]	1.1	0.080	µg/L	1.00	ND	110	0-200			
Heptachlor	1.0	0.050	µg/L	1.00	ND	101	0-200			
Heptachlor [2C]	1.1	0.050	µg/L	1.00	ND	109	0-200			
Heptachlor Epoxide	1.0	0.050	µg/L	1.00	ND	104	0-200			
Heptachlor Epoxide [2C]	1.1	0.050	µg/L	1.00	ND	106	0-200			
Methoxychlor	1.1	0.50	µg/L	1.00	ND	113	0-200			
Methoxychlor [2C]	1.2	0.50	µg/L	1.00	ND	118	0-200			
Surrogate: Decachlorobiphenyl	1.59		µg/L	2.00		79.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.48		µg/L	2.00		74.1	30-150			
Surrogate: Tetrachloro-m-xylene	1.70		µg/L	2.00		85.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.56		µg/L	2.00		78.2	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

TCLP - Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B120156 - SW-846 3510C

Blank (B120156-BLK1)

Prepared: 04/24/15 Analyzed: 04/25/15

Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	2.14		µg/L	2.00		107	30-150			
Surrogate: Decachlorobiphenyl [2C]	2.00		µg/L	2.00		100	30-150			
Surrogate: Tetrachloro-m-xylene	1.47		µg/L	2.00		73.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.52		µg/L	2.00		75.9	30-150			

LCS (B120156-BS1)

Prepared: 04/24/15 Analyzed: 04/25/15

Aroclor-1016	0.49	0.20	µg/L	0.500		97.8	40-140			
Aroclor-1016 [2C]	0.54	0.20	µg/L	0.500		107	40-140			
Aroclor-1260	0.48	0.20	µg/L	0.500		95.1	40-140			
Aroclor-1260 [2C]	0.50	0.20	µg/L	0.500		100	40-140			
Surrogate: Decachlorobiphenyl	1.87		µg/L	2.00		93.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.76		µg/L	2.00		88.2	30-150			
Surrogate: Tetrachloro-m-xylene	1.48		µg/L	2.00		74.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.51		µg/L	2.00		75.6	30-150			

Matrix Spike (B120156-MS1)

Source: 15D0889-09

Prepared: 04/24/15 Analyzed: 04/25/15

Aroclor-1016	0.55	0.20	µg/L	0.625	ND	87.4	40-140			
Aroclor-1016 [2C]	0.54	0.20	µg/L	0.625	ND	86.5	40-140			
Aroclor-1260	0.55	0.20	µg/L	0.625	ND	87.3	40-140			
Aroclor-1260 [2C]	0.56	0.20	µg/L	0.625	ND	89.0	40-140			
Surrogate: Decachlorobiphenyl	1.80		µg/L	2.00		89.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.70		µg/L	2.00		85.0	30-150			
Surrogate: Tetrachloro-m-xylene	1.70		µg/L	2.00		84.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.74		µg/L	2.00		86.9	30-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

TCLP - Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B120043 - SW-846 3510C										
Blank (B120043-BLK1)										
Prepared: 04/23/15 Analyzed: 04/25/15										
2,4-D	ND	0.050	mg/L							
2,4-D [2C]	ND	0.050	mg/L							
2,4,5-TP (Silvex)	ND	0.0050	mg/L							
2,4,5-TP (Silvex) [2C]	ND	0.0050	mg/L							
Surrogate: 2,4-Dichlorophenylacetic acid	0.209		mg/L	0.200		104	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.197		mg/L	0.200		98.3	30-150			
LCS (B120043-BS1)										
Prepared: 04/23/15 Analyzed: 04/25/15										
2,4-D	0.234	0.050	mg/L	0.250		93.7	40-140			
2,4-D [2C]	0.217	0.050	mg/L	0.250		86.7	40-140			
2,4,5-TP (Silvex)	0.0215	0.0050	mg/L	0.0250		86.2	40-140			
2,4,5-TP (Silvex) [2C]	0.0233	0.0050	mg/L	0.0250		93.4	40-140			
Surrogate: 2,4-Dichlorophenylacetic acid	0.197		mg/L	0.200		98.6	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.186		mg/L	0.200		93.0	30-150			
Matrix Spike (B120043-MS1)										
Source: 15D0889-09										
Prepared: 04/23/15 Analyzed: 04/25/15										
2,4-D	0.223	0.050	mg/L	0.250	ND	89.1	30-150			
2,4-D [2C]	0.216	0.050	mg/L	0.250	ND	86.4	30-150			
2,4,5-TP (Silvex)	0.0233	0.0050	mg/L	0.0250	ND	93.1	30-150			
2,4,5-TP (Silvex) [2C]	0.0241	0.0050	mg/L	0.0250	ND	96.5	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid	0.200		mg/L	0.200		100	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.193		mg/L	0.200		96.7	30-150			

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QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B120059 - SW-846 7470A Prep										
Blank (B120059-BLK1)				Prepared & Analyzed: 04/23/15						
Mercury	ND	0.00010	mg/L							
LCS (B120059-BS1)				Prepared & Analyzed: 04/23/15						
Mercury	0.00222	0.00010	mg/L	0.00200		111	80-120			
LCS Dup (B120059-BSD1)				Prepared & Analyzed: 04/23/15						
Mercury	0.00219	0.00010	mg/L	0.00200		109	80-120	1.70	20	
Batch B120088 - SW-846 3010A										
Blank (B120088-BLK1)				Prepared: 04/23/15 Analyzed: 04/25/15						
Arsenic	ND	0.010	mg/L							
Barium	ND	0.050	mg/L							
Cadmium	ND	0.0040	mg/L							
Chromium	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.0050	mg/L							
LCS (B120088-BS1)				Prepared: 04/23/15 Analyzed: 04/25/15						
Arsenic	0.564	0.010	mg/L	0.500		113	80-120			
Barium	0.489	0.050	mg/L	0.500		97.7	80-120			
Cadmium	0.532	0.0040	mg/L	0.500		106	80-120			
Chromium	0.485	0.010	mg/L	0.500		97.1	80-120			
Lead	0.490	0.010	mg/L	0.500		98.0	80-120			
Selenium	0.593	0.050	mg/L	0.500		119	80-120			
Silver	0.450	0.0050	mg/L	0.500		89.9	80-120			
LCS Dup (B120088-BSD1)				Prepared: 04/23/15 Analyzed: 04/25/15						
Arsenic	0.585	0.010	mg/L	0.500		117	80-120	3.61	20	
Barium	0.512	0.050	mg/L	0.500		102	80-120	4.72	20	
Cadmium	0.559	0.0040	mg/L	0.500		112	80-120	4.95	20	
Chromium	0.509	0.010	mg/L	0.500		102	80-120	4.75	20	
Lead	0.491	0.010	mg/L	0.500		98.3	80-120	0.250	20	
Selenium	0.608	0.050	mg/L	0.500		122 *	80-120	2.46	20	L-07
Silver	0.472	0.0050	mg/L	0.500		94.4	80-120	4.85	20	
Matrix Spike (B120088-MS1)				Source: 15D0889-09		Prepared: 04/23/15 Analyzed: 04/25/15				
Arsenic	0.537	0.010	mg/L	0.500	ND	107	75-125			
Barium	1.97	0.050	mg/L	0.500	1.48	98.8	75-125			
Cadmium	0.559	0.0040	mg/L	0.500	0.0147	109	75-125			
Chromium	0.513	0.010	mg/L	0.500	0.0106	101	75-125			
Lead	3.94	0.010	mg/L	0.500	3.44	99.3	75-125			
Selenium	0.662	0.050	mg/L	0.500	ND	132 *	75-125			MS-11
Silver	0.466	0.0050	mg/L	0.500	ND	93.1	75-125			

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BREAKDOWN REPORT

Lab Sample ID: S008369-PEM1 **Analyzed:** 04/23/2015

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	0.74
Endrin [1]	9.15

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	0.93
Endrin [2]	8.46

BREAKDOWN REPORT

Lab Sample ID: S008379-PEM1 **Analyzed:** 04/24/2015

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	1.48
Endrin [1]	20.62

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	2.07
Endrin [2]	19.52

BREAKDOWN REPORT

Lab Sample ID: S008379-PEM2 **Analyzed:** 04/24/2015

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	1.16
Endrin [1]	18.38

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BREAKDOWN REPORT

Lab Sample ID: S008379-PEM2 Analyzed: 04/24/2015

Column Number:	2
Analyte	% Breakdown
4,4'-DDT [2]	2.26
Endrin [2]	16.19

BREAKDOWN REPORT

Lab Sample ID: S008379-PEM3 Analyzed: 04/25/2015

Column Number:	1
Analyte	% Breakdown
4,4'-DDT [1]	1.13
Endrin [1]	16.41

Column Number:	2
Analyte	% Breakdown
4,4'-DDT [2]	1.84
Endrin [2]	16.20

BREAKDOWN REPORT

Lab Sample ID: S008379-PEM4 Analyzed: 04/25/2015

Column Number:	1
Analyte	% Breakdown
4,4'-DDT [1]	1.23
Endrin [1]	15.01

Column Number:	2
Analyte	% Breakdown
4,4'-DDT [2]	1.78
Endrin [2]	14.43

BREAKDOWN REPORT

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BREAKDOWN REPORT

Lab Sample ID: S008379-PEM5 **Analyzed:** 04/25/2015

Column Number: 1
Analyte **% Breakdown**
4,4'-DDT [1] 1.14
Endrin [1] 13.81

Column Number: 2
Analyte **% Breakdown**
4,4'-DDT [2] 1.80
Endrin [2] 13.70

BREAKDOWN REPORT

Lab Sample ID: S008379-PEM6 **Analyzed:** 04/25/2015

Column Number: 1
Analyte **% Breakdown**
4,4'-DDT [1] 5.40
Endrin [1] 9.11

Column Number: 2
Analyte **% Breakdown**
4,4'-DDT [2] 7.46
Endrin [2] 9.19

BREAKDOWN REPORT

Lab Sample ID: S008380-PEM1 **Analyzed:** 04/25/2015

Column Number: 1
Analyte **% Breakdown**
4,4'-DDT [1] 1.68
Endrin [1] 2.79

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BREAKDOWN REPORT

Lab Sample ID: S008380-PEM1 Analyzed: 04/25/2015

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	1.81
Endrin [2]	2.45

BREAKDOWN REPORT

Lab Sample ID: S008380-PEM2 Analyzed: 04/25/2015

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	2.93
Endrin [1]	2.21

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	2.60
Endrin [2]	1.91

BREAKDOWN REPORT

Lab Sample ID: S008380-PEM3 Analyzed: 04/25/2015

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	5.28
Endrin [1]	2.36

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	4.34
Endrin [2]	1.87

BREAKDOWN REPORT

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BREAKDOWN REPORT

Lab Sample ID: S008380-PEM4 Analyzed: 04/26/2015

Column Number:	1
Analyte	% Breakdown
4,4'-DDT [1]	4.92
Endrin [1]	2.34

Column Number:	2
Analyte	% Breakdown
4,4'-DDT [2]	4.56
Endrin [2]	2.04

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SB-01-COMP

SW-846 8081B

Lab Sample ID: 15D0889-02 Date(s) Analyzed: 04/25/2015 04/25/2015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	6.78	0.00	0.00	0.0053	
	2	7.45	0.00	0.00	0.0055	3.0
4,4'-DDE	1	6.37	0.00	0.00	0.0074	
	2	7.01	0.00	0.00	0.0073	1.5
4,4'-DDT	1	6.97	0.00	0.00	0.0051	
	2	7.69	0.00	0.00	0.0067	26.4

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8081B

SB-03-COMP

Lab Sample ID: 15D0889-06 Date(s) Analyzed: 04/25/2015 04/25/2015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	6.78	0.00	0.00	0.022	
	2	7.45	0.00	0.00	0.024	10.1
4,4'-DDE	1	6.37	0.00	0.00	0.016	
	2	7.01	0.00	0.00	0.017	6.7
4,4'-DDT	1	6.98	0.00	0.00	0.080	
	2	7.69	0.00	0.00	0.081	1.9

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8081B

Lab Sample ID: B119880-BS1 Date(s) Analyzed: 04/23/2015 04/23/2015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
	2	5.73	0.00	0.00	0.11	1
Heptachlor	1	5.60	0.00	0.00	0.10	
	2	6.02	0.00	0.00	0.11	6
Heptachlor Epoxide	1	6.15	0.00	0.00	0.10	
	2	6.64	0.00	0.00	0.10	1
Hexachlorobenzene	1	5.06	0.00	0.00	0.10	
	2	5.42	0.00	0.00	0.10	4
Methoxychlor	1	7.35	0.00	0.00	0.099	
	2	8.21	0.00	0.00	0.097	2

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8081B

LCS Dup

Lab Sample ID: B119880-BSD1 Date(s) Analyzed: 04/23/2015 04/23/2015
 Instrument ID (1): ECD2 Instrument ID (2): ECD2
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	6.78	0.00	0.00	0.10	
	2	7.45	0.00	0.00	0.096	4
4,4'-DDE	1	6.38	0.00	0.00	0.10	
	2	7.01	0.00	0.00	0.095	5
4,4'-DDT	1	6.98	0.00	0.00	0.10	
	2	7.69	0.00	0.00	0.10	4
Alachlor	1	5.87	0.00	0.00	0.083	
	2	6.17	0.00	0.00	0.094	13
Aldrin	1	5.77	0.00	0.00	0.099	
	2	6.23	0.00	0.00	0.097	2
alpha-BHC	1	5.16	0.00	0.00	0.10	
	2	5.51	0.00	0.00	0.096	4
beta-BHC	1	5.38	0.00	0.00	0.093	
	2	5.79	0.00	0.00	0.090	3
delta-BHC	1	5.48	0.00	0.00	0.096	
	2	5.98	0.00	0.00	0.094	2
Dieldrin	1	6.56	0.00	0.00	0.098	
	2	7.12	0.00	0.00	0.092	6
Endosulfan I	1	6.40	0.00	0.00	0.094	
	2	6.92	0.00	0.00	0.094	0
Endosulfan II	1	6.87	0.00	0.00	0.096	
	2	7.52	0.00	0.00	0.096	0
Endosulfan Sulfate	1	7.49	0.00	0.00	0.096	
	2	7.99	0.00	0.00	0.095	1
Endrin	1	6.71	0.00	0.00	0.088	
	2	7.35	0.00	0.00	0.089	2
Endrin Aldehyde	1	7.17	0.00	0.00	0.094	
	2	7.78	0.00	0.00	0.092	2
Endrin Ketone	1	7.70	0.00	0.00	0.097	
	2	8.36	0.00	0.00	0.10	3
gamma-BHC (Lindane)	1	5.33	0.00	0.00	0.10	

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8081B

LCS Dup

Lab Sample ID: B119880-BSD1 Date(s) Analyzed: 04/23/2015 04/23/2015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
	2	5.73	0.00	0.00	0.099	3
Heptachlor	1	5.60	0.00	0.00	0.095	
	2	6.02	0.00	0.00	0.098	3
Heptachlor Epoxide	1	6.15	0.00	0.00	0.093	
	2	6.64	0.00	0.00	0.094	1
Hexachlorobenzene	1	5.06	0.00	0.00	0.096	
	2	5.42	0.00	0.00	0.095	1
Methoxychlor	1	7.35	0.00	0.00	0.094	
	2	8.21	0.00	0.00	0.093	1

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8082A

LCS

Lab Sample ID: B119881-BS1 Date(s) Analyzed: 04/24/2015 04/24/2015

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.20	5
Aroclor-1260	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.20	6

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
EPA 608

LCS

Lab Sample ID: B120042-BS1 Date(s) Analyzed: 04/24/2015 04/24/2015

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.46	
	2	0.00	0.00	0.00	0.46	1
Aroclor-1260	1	0.00	0.00	0.00	0.46	
	2	0.00	0.00	0.00	0.46	0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
EPA 608

LCS Dup

Lab Sample ID: B120042-BSD1 Date(s) Analyzed: 04/24/2015 04/24/2015

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.51	
	2	0.00	0.00	0.00	0.49	5
Aroclor-1260	1	0.00	0.00	0.00	0.51	
	2	0.00	0.00	0.00	0.51	0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8151A

LCS

Lab Sample ID: B120043-BS1 Date(s) Analyzed: 04/25/2015 04/25/2015

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	15.54	0.00	0.00	0.0215	
	2	15.21	0.00	0.00	0.0233	8
2,4-D	1	13.68	0.00	0.00	0.234	
	2	13.46	0.00	0.00	0.217	8

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8151A

Matrix Spike

Lab Sample ID: B120043-MS1 Date(s) Analyzed: 04/25/2015 04/25/2015

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): _____ ID: _____ (mm) GC Column (2): _____ ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	15.53	0.00	0.00	0.0233	
	2	15.21	0.00	0.00	0.0241	3
2,4-D	1	13.68	0.00	0.00	0.223	
	2	13.46	0.00	0.00	0.216	3

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8081B

Lab Sample ID: B120154-BS1 Date(s) Analyzed: 04/25/2015 04/25/2015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Endrin	1	6.71	0.00	0.00	1.1	
	2	7.35	0.00	0.00	1.1	4
gamma-BHC (Lindane)	1	5.33	0.00	0.00	1.2	
	2	5.73	0.00	0.00	1.2	1
Heptachlor	1	5.59	0.00	0.00	0.94	
	2	6.02	0.00	0.00	1.0	6
Heptachlor Epoxide	1	6.14	0.00	0.00	1.1	
	2	6.64	0.00	0.00	1.1	1
Methoxychlor	1	7.35	0.00	0.00	1.2	
	2	8.21	0.00	0.00	1.2	3

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

Matrix Spike

SW-846 8081B

Lab Sample ID: B120154-MS1 Date(s) Analyzed: 04/25/2015 04/25/2015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Endrin	1	6.71	0.00	0.00	1.1	
	2	7.35	0.00	0.00	1.1	0
gamma-BHC (Lindane)	1	5.33	0.00	0.00	1.1	
	2	5.73	0.00	0.00	1.1	1
Heptachlor	1	5.59	0.00	0.00	1.0	
	2	6.02	0.00	0.00	1.1	9
Heptachlor Epoxide	1	6.14	0.00	0.00	1.0	
	2	6.64	0.00	0.00	1.1	6
Methoxychlor	1	7.35	0.00	0.00	1.1	
	2	8.21	0.00	0.00	1.2	6

FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
 - † Wide recovery limits established for difficult compound.
 - ‡ Wide RPD limits established for difficult compound.
 - # Data exceeded client recommended or regulatory level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
 No results have been blank subtracted unless specified in the case narrative section.
- B Analyte is found in the associated blank as well as in the sample.
 - B-07 Data is not affected by elevated level in blank since sample result is >10x level found in the blank.
 - DL-01 Elevated reporting limits for all volatile compounds due to foaming sample matrix.
 - H-05 Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.
 - L-03 Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
 - L-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
 - L-07 Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
 - L-10 The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be bias on the high side.
 - MS-07A Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
 - MS-11 Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
 - PR-03 Sample preserved in the laboratory, not in the field as required by the method.
 - PR-15 According to the NY ELAP program, all voa results less than 0.2mg/Kg are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.
 - R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
 - S-12 Surrogate recovery is outside of control limits on confirmatory column, but within control limits on primary column. Data validation is not affected.
 - V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
 - V-06 Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
 - V-16 Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
 - V-20 Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 420.1 in Water	
Phenol	CT,MA,NH,NY,RI,NC,ME,VA,NJ
EPA 608 in Water	
Aroclor-1016	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1221	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1232	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1242	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1248	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1254	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1260	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,MA,NH,NY,RI,NC,ME,VA,NJ
EPA 624 in Water	
Acrylonitrile	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Benzene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Bromodichloromethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Bromoform	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Bromomethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Carbon Tetrachloride	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Chlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Chlorodibromomethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Chloroethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
2-Chloroethyl Vinyl Ether	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Chloroform	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Chloromethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,2-Dichlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,3-Dichlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,4-Dichlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,2-Dichloroethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,1-Dichloroethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,1-Dichloroethylene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
trans-1,2-Dichloroethylene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,2-Dichloropropane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
cis-1,3-Dichloropropene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
trans-1,3-Dichloropropene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Ethylbenzene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Methyl tert-Butyl Ether (MTBE)	NC
Methylene Chloride	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Naphthalene	NC
1,1,2,2-Tetrachloroethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Tetrachloroethylene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Toluene	CT,MA,NH,NY,RI,NC,ME,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 624 in Water	
1,2,4-Trichlorobenzene	NC
1,1,1-Trichloroethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
1,1,2-Trichloroethane	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Trichloroethylene	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,MA,NH,NY,RI,NC,ME,VA,NJ
Vinyl Chloride	CT,MA,NH,NY,RI,NC,ME,VA,NJ
m+p Xylene	CT,MA,NH,NY,RI,NC,VA,NJ
o-Xylene	CT,MA,NH,NY,RI,NC,VA,NJ
SM 21-22 4500 NO3 F in Water	
Nitrate/Nitrite as N	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM19-22 4500-N Org B,C-NH3 C in Water	
Total Kjeldahl Nitrogen	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM21-22 2540B in Water	
Total Solids	NY,CT,RI,NH,NC,ME,VA,NJ
SM21-22 2540D in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM21-22 4500 CL B in Water	
Chloride	NH,CT,MA,NY,RI,NC,ME,VA,NJ
SM21-22 4500 H B in Water	
pH	CT,MA,RI
SM21-22 5210B in Water	
Carbonaceous BOD	NY,CT,RI,NH,ME,VA,NC,NJ
SW-846 1030 in Soil	
Ignitability	NY,NH,CT,NC,ME,VA,NJ
SW-846 6010C in Soil	
Aluminum	CT,NH,NY,ME,VA,NC,NJ
Antimony	CT,NH,NY,NC,ME,VA,NJ
Arsenic	CT,NH,NY,ME,NC,VA,NJ
Barium	CT,NH,NY,ME,NC,VA,NJ
Beryllium	CT,NH,NY,ME,NC,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Calcium	CT,NH,NY,ME,NC,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
Cobalt	CT,NH,NY,ME,NC,VA,NJ
Copper	CT,NH,NY,ME,NC,VA,NJ
Iron	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,AIHA,ME,NC,VA,NJ
Magnesium	CT,NH,NY,ME,NC,VA,NJ
Manganese	CT,NH,NY,ME,NC,VA,NJ
Nickel	CT,NH,NY,ME,NC,VA,NJ
Potassium	CT,NH,NY,ME,NC,VA,NJ
Selenium	CT,NH,NY,ME,NC,VA,NJ
Silver	CT,NH,NY,ME,NC,VA,NJ
Sodium	CT,NH,NY,ME,NC,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Soil	
Thallium	CT,NH,NY,ME,NC,VA,NJ
Vanadium	CT,NH,NY,ME,NC,VA,NJ
Zinc	CT,NH,NY,ME,NC,VA,NJ
SW-846 6010C in Water	
Arsenic	NY,CT,NC,ME,NH,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Copper	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,NC,ME,VA,NJ
Nickel	CT,NH,NY,ME,NC,VA,NJ
Zinc	CT,NH,NY,ME,NC,VA,NJ
Barium	NY,CT,ME,NC,NH,VA,NJ
Cadmium	NY,CT,ME,NC,NH,VA,NJ
Chromium	NY,CT,ME,NC,NH,VA,NJ
Lead	NY,CT,ME,NC,NH,VA,NJ
Selenium	CT,ME,NC,NH,NY,VA,NJ
Silver	CT,ME,NC,NH,NY,VA,NJ
SW-846 7196A in Water	
Hexavalent Chromium	CT,NH,NY,NC,ME,VA,NJ
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA,NJ
Mercury	CT,ME,NC,NH,NY,VA,NJ
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA,NJ
SW-846 8015C in Soil	
Gasoline Range Organics (GRO)	NY,VA,NH,NJ
Diesel Range Organics	NY,VA,NH,NJ
SW-846 8081B in Soil	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA,NJ
Aldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
beta-BHC	CT,NH,NY,ME,NC,VA,NJ
beta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
delta-BHC	CT,NH,NY,ME,NC,VA,NJ
delta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA,NJ
Chlordane	CT,NH,NY,ME,NC,VA,NJ
Chlordane [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8081B in Soil	
4,4'-DDT	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA,NJ
Dieldrin	CT,NH,NY,ME,NC,VA,NJ
Dieldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin	CT,NH,NY,ME,NC,VA,NJ
Endrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA,NJ
Heptachlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA,NJ
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA,NJ
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Toxaphene	CT,NH,NY,ME,NC,VA,NJ
Toxaphene [2C]	CT,NH,NY,ME,NC,VA,NJ
SW-846 8081B in Water	
Alachlor	NC
Alachlor	NC
Alachlor [2C]	NC
Alachlor [2C]	NC
Aldrin	CT,ME,NC,NH,NY,VA,NJ
Aldrin	CT,NH,NY,ME,NC,VA,NJ
Aldrin [2C]	CT,ME,NC,NH,NY,VA,NJ
Aldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC	CT,ME,NC,NH,NY,VA,NJ
alpha-BHC [2C]	CT,ME,NC,NH,NY,VA,NJ
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
beta-BHC	CT,NH,NY,ME,NC,VA,NJ
beta-BHC	CT,ME,NC,NH,NY,VA,NJ
beta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
beta-BHC [2C]	CT,ME,NC,NH,NY,VA,NJ
delta-BHC	CT,NH,NY,ME,NC,VA,NJ
delta-BHC	CT,ME,NC,NH,NY,VA,NJ
delta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8081B in Water</i>	
delta-BHC [2C]	CT,ME,NC,NH,NY,VA,NJ
gamma-BHC (Lindane)	CT,ME,NC,NH,NY,VA,NJ
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane) [2C]	CT,ME,NC,NH,NY,VA,NJ
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA,NJ
Chlordane	CT,NH,NY,ME,NC,VA,NJ
Chlordane	CT,ME,NC,NH,NY,VA,NJ
Chlordane [2C]	CT,NH,NY,ME,NC,VA,NJ
Chlordane [2C]	CT,ME,NC,NH,NY,VA,NJ
4,4'-DDD	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD	CT,ME,NC,NH,NY,VA,NJ
4,4'-DDD [2C]	CT,ME,NC,NH,NY,VA,NJ
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE	CT,ME,NC,NH,NY,VA,NJ
4,4'-DDE	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE [2C]	CT,ME,NC,NH,NY,VA,NJ
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT	CT,ME,NC,NH,NY,VA,NJ
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT [2C]	CT,ME,NC,NH,NY,VA,NJ
Dieldrin	CT,ME,NC,NH,NY,VA,NJ
Dieldrin	CT,NH,NY,ME,NC,VA,NJ
Dieldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Dieldrin [2C]	CT,ME,NC,NH,NY,VA,NJ
Endosulfan I	CT,ME,NC,NH,NY,VA,NJ
Endosulfan I	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I [2C]	CT,ME,NC,NH,NY,VA,NJ
Endosulfan II	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II	CT,ME,NC,NH,NY,VA,NJ
Endosulfan II [2C]	CT,ME,NC,NH,NY,VA,NJ
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate	CT,ME,NC,NH,NY,VA,NJ
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate [2C]	CT,ME,NC,NH,NY,VA,NJ
Endrin	CT,NH,NY,ME,NC,VA,NJ
Endrin	CT,ME,NC,NH,NY,VA,NJ
Endrin [2C]	CT,ME,NC,NH,NY,VA,NJ
Endrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde	CT,ME,NC,NH,NY,VA,NJ
Endrin Aldehyde	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde [2C]	CT,ME,NC,NH,NY,VA,NJ
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Ketone	NC
Endrin Ketone	NC

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8081B in Water	
Endrin Ketone [2C]	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA,NJ
Heptachlor	CT,ME,NC,NH,NY,VA,NJ
Heptachlor [2C]	CT,ME,NC,NH,NY,VA,NJ
Heptachlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide	CT,ME,NC,NH,NY,VA,NJ
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide [2C]	CT,ME,NC,NH,NY,VA,NJ
Hexachlorobenzene	NC
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA,NJ
Methoxychlor	CT,ME,NC,NH,NY,VA,NJ
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Methoxychlor [2C]	CT,ME,NC,NH,NY,VA,NJ
Toxaphene	CT,ME,NC,NH,NY,VA,NJ
Toxaphene	CT,NH,NY,ME,NC,VA,NJ
Toxaphene [2C]	CT,NH,NY,ME,NC,VA,NJ
Toxaphene [2C]	CT,ME,NC,NH,NY,VA,NJ
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
SW-846 8082A in Water	
Aroclor-1016	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1016 [2C]	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1221	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1221 [2C]	CT,NY,ME,NC,NH,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Water	
Aroclor-1232	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1232 [2C]	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1242	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1242 [2C]	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1248	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1248 [2C]	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1254	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1254 [2C]	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1260	CT,NY,ME,NC,NH,VA,NJ
Aroclor-1260 [2C]	CT,NY,ME,NC,NH,VA,NJ
SW-846 8151A in Soil	
2,4-D	NY,ME,NC,NH,VA,CT,NJ
2,4-D [2C]	NY,ME,NC,NH,VA,CT,NJ
2,4-DB	NY,ME,NC,NH,VA,CT,NJ
2,4-DB [2C]	NY,ME,NC,NH,VA,CT,NJ
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT,NJ
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT,NJ
2,4,5-T	NY,ME,NC,NH,VA,CT,NJ
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT,NJ
Dalapon	NY,ME,NC,NH,VA,CT,NJ
Dalapon [2C]	NY,ME,NC,NH,VA,CT,NJ
Dicamba	NY,ME,NC,NH,VA,CT,NJ
Dicamba [2C]	NY,ME,NC,NH,VA,CT,NJ
Dichloroprop	NY,ME,NC,NH,VA,CT,NJ
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT,NJ
Dinoseb	NY,ME,NC,NH,VA,CT,NJ
Dinoseb [2C]	NY,ME,NC,NH,VA,CT,NJ
MCPA	NY,ME,NC,NH,VA,CT,NJ
MCPA [2C]	NY,ME,NC,NH,VA,CT,NJ
MCPP	NY,ME,NC,NH,VA,CT,NJ
MCPP [2C]	NY,ME,NC,NH,VA,CT,NJ
SW-846 8260C in Soil	
Acetone	ME,NY,VA,NJ
Acetone	CT,NH,NY,ME,VA,NJ
Acrylonitrile	CT,NH,NY,ME,VA,NJ
Benzene	CT,NH,NY,ME,VA,NJ
Benzene	ME,NY,CT,NC,VA,NJ
Bromobenzene	ME,NY,VA,NJ
Bromobenzene	NH,NY,ME,VA,NJ
Bromochloromethane	ME,NY,VA,NJ
Bromochloromethane	NH,NY,ME,VA,NJ
Bromodichloromethane	ME,NY,VA,NJ
Bromodichloromethane	CT,NH,NY,ME,VA,NJ
Bromoform	ME,NY,VA,NJ
Bromoform	CT,NH,NY,ME,VA,NJ
Bromomethane	ME,NY,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
Bromomethane	CT,NH,NY,ME,VA,NJ
2-Butanone (MEK)	CT,NH,NY,ME,VA,NJ
2-Butanone (MEK)	ME,NY,CT,NC,VA,NJ
n-Butylbenzene	ME,NY,VA,NJ
n-Butylbenzene	CT,NH,NY,ME,VA,NJ
sec-Butylbenzene	CT,NH,NY,ME,VA,NJ
sec-Butylbenzene	ME,NY,VA,NJ
tert-Butylbenzene	ME,NY,VA,NJ
tert-Butylbenzene	CT,NH,NY,ME,VA,NJ
Carbon Disulfide	CT,NH,NY,ME,VA,NJ
Carbon Disulfide	ME,VA
Carbon Tetrachloride	ME,NY,CT,NC,VA,NJ
Carbon Tetrachloride	CT,NH,NY,ME,VA,NJ
Chlorobenzene	CT,NH,NY,ME,VA,NJ
Chlorobenzene	ME,NY,CT,NC,VA,NJ
Chlorodibromomethane	ME,NY,VA,NJ
Chlorodibromomethane	CT,NH,NY,ME,VA,NJ
Chloroethane	ME,NY,VA,NJ
Chloroethane	CT,NH,NY,ME,VA,NJ
Chloroform	ME,NY,CT,NC,VA,NJ
Chloroform	CT,NH,NY,ME,VA,NJ
Chloromethane	CT,NH,NY,ME,VA,NJ
Chloromethane	ME,NY,VA,NJ
2-Chlorotoluene	ME,NY,VA,NJ
2-Chlorotoluene	CT,NH,NY,ME,VA,NJ
4-Chlorotoluene	CT,NH,NY,ME,VA,NJ
4-Chlorotoluene	ME,NY,VA,NJ
Dibromomethane	ME,NY,VA,NJ
Dibromomethane	NH,NY,ME,VA,NJ
1,2-Dichlorobenzene	CT,NH,NY,ME,VA,NJ
1,2-Dichlorobenzene	ME,NY,VA,NJ
1,3-Dichlorobenzene	ME,NY,VA,NJ
1,3-Dichlorobenzene	CT,NH,NY,ME,VA,NJ
1,4-Dichlorobenzene	CT,NH,NY,ME,VA,NJ
1,4-Dichlorobenzene	ME,NY,CT,NC,VA,NJ
Dichlorodifluoromethane (Freon 12)	ME,NY,VA,NJ
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA,NJ
1,1-Dichloroethane	CT,NH,NY,ME,VA,NJ
1,1-Dichloroethane	ME,NY,VA,NJ
1,2-Dichloroethane	CT,NH,NY,ME,VA,NJ
1,2-Dichloroethane	ME,NY,CT,NC,VA,NJ
1,1-Dichloroethylene	ME,NY,CT,NC,VA,NJ
1,1-Dichloroethylene	CT,NH,NY,ME,VA,NJ
cis-1,2-Dichloroethylene	ME,NY,VA,NJ
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA,NJ
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA,NJ
trans-1,2-Dichloroethylene	ME,NY,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
1,2-Dichloropropane	CT,NH,NY,ME,VA,NJ
1,2-Dichloropropane	ME,NY,VA,NJ
1,3-Dichloropropane	ME,NY,VA,NJ
1,3-Dichloropropane	NH,NY,ME,VA,NJ
2,2-Dichloropropane	ME,NY,VA,NJ
2,2-Dichloropropane	NH,NY,ME,VA,NJ
1,1-Dichloropropene	ME,NY,VA,NJ
1,1-Dichloropropene	NH,NY,ME,VA,NJ
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA,NJ
cis-1,3-Dichloropropene	ME,NY,VA,NJ
trans-1,3-Dichloropropene	ME,NY,VA,NJ
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA,NJ
1,4-Dioxane	NJ
Ethylbenzene	CT,NH,NY,ME,VA,NJ
Ethylbenzene	ME,NY,VA,NJ
Hexachlorobutadiene	ME,NY,VA,NJ
Hexachlorobutadiene	NH,NY,ME,VA,NJ
2-Hexanone (MBK)	CT,NH,NY,ME,VA,NJ
2-Hexanone (MBK)	ME,NY,VA,NJ
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA,NJ
Isopropylbenzene (Cumene)	ME,NY,VA,NJ
p-Isopropyltoluene (p-Cymene)	NY,NJ
p-Isopropyltoluene (p-Cymene)	NH,NY,NJ
Methyl tert-Butyl Ether (MTBE)	NY,VA,NJ
Methyl tert-Butyl Ether (MTBE)	NY,VA,NJ
Methylene Chloride	ME,NY,VA,NJ
Methylene Chloride	CT,NH,NY,ME,VA,NJ
4-Methyl-2-pentanone (MIBK)	NY,VA,NJ
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA,NJ
Naphthalene	NH,NY,ME,VA,NJ
Naphthalene	ME,NY,VA,NJ
n-Propylbenzene	NY,NJ
n-Propylbenzene	NH,NY,NJ
Styrene	ME,NY,VA,NJ
Styrene	CT,NH,NY,ME,VA,NJ
1,1,1,2-Tetrachloroethane	ME,NY,VA,NJ
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA,NJ
1,1,2,2-Tetrachloroethane	ME,NY,VA,NJ
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA,NJ
Tetrachloroethylene	CT,NH,NY,ME,VA,NJ
Tetrachloroethylene	ME,NY,CT,NC,VA,NJ
Toluene	ME,NY,VA,NJ
Toluene	CT,NH,NY,ME,VA,NJ
1,2,3-Trichlorobenzene	ME
1,2,4-Trichlorobenzene	ME,NY,VA,NJ
1,2,4-Trichlorobenzene	NH,NY,ME,VA,NJ
1,3,5-Trichlorobenzene	ME

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Soil	
1,1,1-Trichloroethane	CT,NH,NY,ME,VA,NJ
1,1,1-Trichloroethane	ME,NY,VA,NJ
1,1,2-Trichloroethane	CT,NH,NY,ME,VA,NJ
1,1,2-Trichloroethane	ME,NY,VA,NJ
Trichloroethylene	ME,NY,CT,NC,VA,NJ
Trichloroethylene	CT,NH,NY,ME,VA,NJ
Trichlorofluoromethane (Freon 11)	NY,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA,NJ
1,2,3-Trichloropropane	ME,NY,VA,NJ
1,2,3-Trichloropropane	NH,NY,ME,VA,NJ
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA,NJ
1,2,4-Trimethylbenzene	ME,NY,VA,NJ
1,3,5-Trimethylbenzene	ME,NY,VA,NJ
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA,NJ
Vinyl Chloride	CT,NH,NY,ME,VA,NJ
Vinyl Chloride	ME,NY,CT,NC,VA,NJ
m+p Xylene	ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
o-Xylene	ME,VA
SW-846 8270D in Soil	
Acenaphthene	CT,NY,NH,ME,NC,VA,NJ
Acenaphthylene	CT,NY,NH,ME,NC,VA,NJ
Acetophenone	NY,NH,ME,NC,VA,NJ
Aniline	NY,NH,ME,NC,VA,NJ
Anthracene	CT,NY,NH,ME,NC,VA,NJ
Benzidine	CT,NY,NH,ME,NC,VA,NJ
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA,NJ
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA,NJ
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA,NJ
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA,NJ
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA,NJ
Benzoic Acid	NY,NH,ME,NC,VA,NJ
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA,NJ
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA,NJ
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA,NJ
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA,NJ
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA,NJ
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA,NJ
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA,NJ
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA,NJ
2-Chloronaphthalene	CT,NY,NH,NC,VA,NJ
2-Chlorophenol	CT,NY,NH,ME,NC,VA,NJ
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA,NJ
Chrysene	CT,NY,NH,ME,NC,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Soil</i>	
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA,NJ
Dibenzofuran	CT,NY,NH,ME,NC,VA,NJ
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA,NJ
1,2-Dichlorobenzene	NY,NH,ME,NC,VA,NJ
1,3-Dichlorobenzene	NY,NH,ME,NC,VA,NJ
1,4-Dichlorobenzene	NY,NH,ME,NC,VA,NJ
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA,NJ
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA,NJ
Diethylphthalate	CT,NY,NH,ME,NC,VA,NJ
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA,NJ
Dimethylphthalate	CT,NY,NH,ME,NC,VA,NJ
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA,NJ
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA,NJ
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA,NJ
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA,NJ
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA,NJ
1,2-Diphenylhydrazine (as Azobenzene)	NY,NH,ME,NC,VA,NJ
Fluoranthene	CT,NY,NH,ME,NC,VA,NJ
Fluorene	NY,NH,ME,NC,VA,NJ
Hexachlorobenzene	CT,NY,NH,ME,NC,VA,NJ
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA,NJ
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA,NJ
Hexachloroethane	CT,NY,NH,ME,NC,VA,NJ
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA,NJ
Isophorone	CT,NY,NH,ME,NC,VA,NJ
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA,NJ
2-Methylphenol	CT,NY,NH,ME,NC,VA,NJ
3/4-Methylphenol	CT,NY,NH,ME,NC,VA,NJ
Naphthalene	CT,NY,NH,ME,NC,VA,NJ
2-Nitroaniline	CT,NY,NH,ME,NC,VA,NJ
3-Nitroaniline	CT,NY,NH,ME,NC,VA,NJ
4-Nitroaniline	CT,NY,NH,ME,NC,VA,NJ
Nitrobenzene	CT,NY,NH,ME,NC,VA,NJ
2-Nitrophenol	CT,NY,NH,ME,NC,VA,NJ
4-Nitrophenol	CT,NY,NH,ME,NC,VA,NJ
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA,NJ
N-Nitrosodiphenylamine	CT,NY,NH,ME,NC,VA,NJ
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA,NJ
Pentachloronitrobenzene	NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA,NJ
Phenanthrene	CT,NY,NH,ME,NC,VA,NJ
Phenol	CT,NY,NH,ME,NC,VA,NJ
Pyrene	CT,NY,NH,ME,NC,VA,NJ
Pyridine	CT,NY,NH,ME,NC,VA,NJ
1,2,4,5-Tetrachlorobenzene	NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D in Soil	
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA,NJ
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA,NJ
2-Fluorophenol	NC
SW-846 8270D in Water	
Acenaphthene	ME,NC,NH,NY,VA,NJ
Acenaphthylene	ME,NC,NH,NY,VA,NJ
Acetophenone	ME,NC,NH
Aniline	ME,NC,NH,NY,VA,NJ
Anthracene	ME,NC,NH,NY,VA,NJ
Benzo(a)anthracene	ME,NC,NH,NY,VA,NJ
Benzo(a)pyrene	ME,NC,NH,NY,VA,NJ
Benzo(b)fluoranthene	ME,NC,NH,NY,VA,NJ
Benzo(g,h,i)perylene	ME,NC,NH,NY,VA,NJ
Benzo(k)fluoranthene	ME,NC,NH,NY,VA,NJ
Bis(2-chloroethoxy)methane	ME,NC,NH,NY,VA,NJ
Bis(2-chloroethyl)ether	ME,NC,NH,NY,VA,NJ
Bis(2-chloroisopropyl)ether	ME,NC,NH,NY,VA,NJ
Bis(2-Ethylhexyl)phthalate	ME,NC,NH,NY,VA,NJ
4-Bromophenylphenylether	ME,NC,NH,NY,VA,NJ
Butylbenzylphthalate	ME,NC,NH,NY,VA,NJ
4-Chloroaniline	ME,NC,NH,NY,VA,NJ
2-Chloronaphthalene	NC,NY,VA,NJ
2-Chlorophenol	ME,NC,NH,NY,VA,NJ
Chrysene	ME,NC,NH,NY,VA,NJ
Dibenz(a,h)anthracene	ME,NC,NH,NY,VA,NJ
Dibenzofuran	ME,NC,NH,NY,VA,NJ
Di-n-butylphthalate	ME,NC,NH,NY,VA,NJ
1,2-Dichlorobenzene	ME,NC,NH,NY,VA,NJ
1,3-Dichlorobenzene	ME,NC,NH,NY,VA,NJ
1,4-Dichlorobenzene	ME,NC,NH,NY,VA,NJ
3,3-Dichlorobenzidine	ME,NC,NH,NY,VA,NJ
2,4-Dichlorophenol	ME,NC,NH,NY,VA,NJ
Diethylphthalate	ME,NC,NH,NY,VA,NJ
2,4-Dimethylphenol	ME,NC,NH,NY,VA,NJ
Dimethylphthalate	ME,NC,NH,NY,VA,NJ
2,4-Dinitrophenol	ME,NC,NH,NY,VA,NJ
2,4-Dinitrotoluene	ME,NC,NH,CT,NY,VA,NJ
2,6-Dinitrotoluene	ME,NC,NH,NY,VA,NJ
Di-n-octylphthalate	ME,NC,NH,NY,VA,NJ
1,2-Diphenylhydrazine (as Azobenzene)	ME,NC,NH
Fluoranthene	ME,NC,NH,NY,VA,NJ
Fluorene	ME,NC,NH,NY,VA,NJ
Hexachlorobenzene	ME,NC,NH,CT,NY,VA,NJ
Hexachlorobutadiene	ME,NC,NH,CT,NY,VA,NJ
Hexachloroethane	ME,NC,NH,CT,NY,VA,NJ
Indeno(1,2,3-cd)pyrene	ME,NC,NH,NY,VA,NJ

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Water</i>	
Isophorone	ME,NC,NH,NY,VA,NJ
2-Methylnaphthalene	ME,NC,NH,NY,VA,NJ
2-Methylphenol	ME,NC,NH,CT
3/4-Methylphenol	ME,NC,NH,CT
Naphthalene	ME,NC,NH,NY,VA,NJ
Nitrobenzene	ME,NC,NH,CT,NY,VA,NJ
2-Nitrophenol	ME,NC,NH,NY,VA,NJ
4-Nitrophenol	ME,NC,NH,NY,VA,NJ
Pentachlorophenol	ME,NC,NH,CT,NY,VA,NJ
Phenanthrene	ME,NC,NH,NY,VA,NJ
Phenol	ME,NC,NH,NY,VA,NJ
Pyrene	ME,NC,NH,NY,VA,NJ
Pyridine	ME,NC,NH,CT,NY,VA,NJ
1,2,4-Trichlorobenzene	ME,NC,NH,NY,VA,NJ
2,4,5-Trichlorophenol	ME,NC,NH,CT,NY,VA,NJ
2,4,6-Trichlorophenol	ME,NC,NH,CT,NY,VA,NJ
2-Fluorophenol	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

CHAIN OF CUSTODY RECORD

con-test
ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

Company Name: URO Engineers, Inc.
Address: 703 Lorimer Street
Brooklyn, NY 11211
Attention: Steve Frank
Project Location: Forpoise Pedestrian Bridge
Furthing Meadows Park, Queens
Sampled By: Eva Jekubowska

Project # 15-008-0265
Client PO# ---
Telephone: 716 882-9645
Project # 15-008-0265
Client PO# ---
DATA DELIVERY (check all that apply)
 FAX EMAIL WEBSITE
Format: PDF EXCEL OGIS OTHER
Email: franks@iro.com
Project Proposal Provided? (for billing purposes)
 yes proposal date

Con-Test Lab ID <small>(laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	Matrix Code	Conc Code
		Beginning Date/Time	Ending Date/Time				
01	SB-01-5.5-6.0'	4/17/15	1135	X	S	U	
02	SB-01-COMP		1140	X	S	U	
03	SB-02-3.5-4.0'		1330	X	S	U	
04	SB-02-COMP		1335	X	S	U	
05	SB-03-4.5-5.0'		1045	X	S	U	
06	SB-03-COMP		1050	X	S	U	
07	SB-04-4.5-5.0'		0845	X	S	U	
08	SB-04-COMP		0850	X	S	U	
09	NC-01		1415	X	S	U	


Comments: NC-01 (SB-01 through SB-04)
Version: _____
Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Requisitioned by: (signature) Eva Jekubowska Date: 4/17/15
Received by: (signature) R Sean Date: 4/17/15
Requisitioned by: (signature) R Sean Date: 4/17/15
Received by: (signature) R Sean Date: 4/17/15

Turnaround ^{††}
 7-Day
 10-Day
 Other 5 day
 RUSH [†]
 24-Hr 48-Hr
 72-Hr 14-Day
 Require lab approval

Detection Limit Requirements
 Massachusetts: _____
 Connecticut: _____
 Other: _____

Is your project MCP or RCP?
 MCP Form Required
 RCP Form Required
 MA State DW Form Required PWSID # _____

Accredited

 NELAC & AIHA-LAP, LLC
 Accredited
 WBE/DBE Certified

ANALYSIS REQUESTED

ANALYSIS REQUESTED	TCL VOCs	TCL SVOCs	PAH Metals	Herbicides	PCBs	TPHC DPA/Geo	FILTRUP Ind. PCBs	RCRA Characteristics
	X	X	X	X	X	X	X	X

of Containers: _____
 ** Preservation: _____
 *** Container Code: _____
 Dissolved Metals
 Field Filled
 Lab to Filter
 *** Cont. Code:
 A=amber glass
 G=glass
 P=plastic
 ST=sterile
 V=vial
 S=summa can
 T=redlar bag
 O=Other
 ** Preservation
 I=iced
 M=HCL
 M=Methanol
 N=Nitric Acid
 S=Sulfuric Acid
 B=Sodium bisulfate
 X=Na hydroxide
 T=Na thiosulfate
 O=Other
 * Matrix Code:
 GW=groundwater
 WW=wastewater
 DW=drinking water
 A=air
 S=soil/solid
 SL=sludge
 O=other

39 Spruce St.
 East Longmeadow, MA. 01028
 P: 413-525-2332
 F: 413-525-6405
 www.contestlabs.com



Sample Receipt Checklist

CLIENT NAME: LiRO Engineers RECEIVED BY: KB DATE: 4/17/15

- 1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
- 2) Does the chain agree with the samples? Yes No
 If not, explain:
- 3) Are all the samples in good condition? Yes No
 If not, explain:

4) How were the samples received:

On Ice Direct from Sampling Ambient In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A
 Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.9°

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified Dave Date 4/17/15 Time 18:55

7) Location where samples are stored:

19

Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____

9) Do all samples have the proper Base pH: Yes No N/A _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	<u>6</u>	<u>16.8</u> oz amber/clear jar	<u>5</u>
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	<u>4</u>
1 Liter Plastic	<u>2</u>	Plastic Bag / Ziploc	
500 mL Plastic	<u>2</u>	SOC Kit	
250 mL plastic	<u>2</u>	Non-ConTest Container	
40 mL Vial - type listed below	<u>6</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	<u>2</u>
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl 6 # Methanol _____
 # Bisulfate _____ # DI Water _____
 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy)
Any False statement will be brought to the attention of Client

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	F	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Doc #277 Rev. 4 August 2013

Who notified of False statements?
 Log-In Technician Initials:

KB

Date/Time:

Date/Time:

4/17/15
 18:55



Thursday, May 07, 2015

Attn: Laurie Kopyscinski
Con-Test
39 Spruce Street
East Longmeadow, MA 01028

Project ID: 15D0889
Sample ID#s: BJ10849 - BJ10850

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



SDG Comments

May 07, 2015

SDG I.D.: GBJ10849

Sample BJ10849 was received past hold time for Carbonaceous BOD (SM5210B).
Sample BJ10850 was received past hold time for Carbonaceous BOD (SM5210B).



Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 07, 2015

FOR: Attn: Laurie Kopyscinski
 Con-Test
 39 Spruce Street
 East Longmeadow, MA 01028

Sample Information

Matrix: WATER
 Location Code: CON-TEST
 Rush Request: Standard
 P.O.#: 15D0889

Custody Information

Collected by:
 Received by: LK
 Analyzed by: see "By" below

Date

04/17/15
 05/01/15

Time

14:00
 15:35

Laboratory Data

SDG ID: GBJ10849
 Phoenix ID: BJ10849

Project ID: 15D0889
 Client ID: 10

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Carbonaceous BOD	< 4.4	4.4	mg/L	3	05/01/15 18:30	CB/RM	SM5210B-01

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
 This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 07, 2015

Reviewed and Released by: Deb Lawrie, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 07, 2015

FOR: Attn: Laurie Kopyscinski
 Con-Test
 39 Spruce Street
 East Longmeadow, MA 01028

Sample Information

Matrix: WATER
 Location Code: CON-TEST
 Rush Request: Standard
 P.O.#: 15D0889

Custody Information

Collected by:
 Received by: LK
 Analyzed by: see "By" below

Date Time

04/17/15 10:00
 05/01/15 15:35

Laboratory Data

SDG ID: GBJ10849
 Phoenix ID: BJ10850

Project ID: 15D0889
 Client ID: 11

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Carbonaceous BOD	33	33	mg/L	30	05/01/15 18:30	CB/RM	SM5210B-01

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
 This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 07, 2015

Reviewed and Released by: Deb Lawrie, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 07, 2015

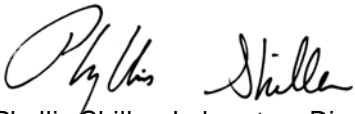
QA/QC Data

SDG I.D.: GBJ10849

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 306622 (mg/L), QC Sample No: BJ10751 (BJ10849, BJ10850)													
B.O.D./5 day	BRL	2.0	6.1	6.4	NC	103			99.6			70 - 130	20

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference


 Phyllis Shiller, Laboratory Director
 May 07, 2015

Thursday, May 07, 2015

Sample Criteria Exceedences Report

Page 1 of 1

Criteria: None

GBJ10849 - CON-TEST

State: MA

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

SUBCONTRACT ORDER
Con-Test Analytical Laboratory
15D0889



*Subcontract lab must notify Con-Test Analytical
 Lot of any MCL exceedance within 24-hours of
 obtaining valid data.*

SENDING LABORATORY:

Con-Test Analytical Laboratory
 39 Spruce Street
 East Longmeadow, MA 01028
 Phone: 413.525.2332
 Fax: 413.525.6405
 Project Manager: James M. Georgantas

RECEIVING LABORATORY:

Phoenix Laboratory
 587 Middle Turnpike East
 Manchester, CT 06040
 Phone : (860) 645-1102
 Fax: (860) 645-0823

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 15D0889-10	Water	Sampled:04/17/15 14:00		
* Carbonaceous BiochemOxygDe	05/07/15 13:00	04/19/15 14:00		
<i>Containers Supplied:</i> 500 mL plastic Unpreserv				
Sample ID: 15D0889-11	Water	Sampled:04/17/15 10:00		
* Carbonaceous BiochemOxygDe	05/07/15 13:00	04/19/15 10:00		
<i>Containers Supplied:</i> 1 L plastic Unpreserved (I				

* Left voicemail for James about samples being past hold 5/1/15 (LK)

<i>K. Miller</i>	<i>5/1/15 14:30</i>	<i>G.M.</i>	<i>S.M.</i>
Released By	Date	Received By	Date
<i>G. Miller</i>	<i>5-1-15</i>	<i>U. Miller</i>	<i>5-1-15 15:35</i>
Released By	Date	Received By	Date

Laura Kinnin

From: Laura Kinnin [laurak@phoenixlabs.com]
Sent: Friday, May 01, 2015 3:22 PM
To: 'jgeorgantas@contestlabs.com'
Subject: 15D0889

Hi James

We picked up these samples today and the chain says they were sampled on 4/17/15 for CBOD, if this is correct they are past hold. Would you like to analyze past hold?

I left a voicemail for you also, please let me know how you would like to proceed.

Thank you

Laura Kinnin

Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040
Ph: 860-645-1102 ext: 339



APPENDIX F

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS



Robert Kreuzer

Vice President/ Project Manager

Education

B.S., Geological Science, State University of New York College at Buffalo

Licenses/Registrations

NYSDEC Asbestos Contractor/Supervisor
NYSDEC Asbestos Project Monitor

Certifications

OSHA 40 Hazwoper
OSHA 8 Certified
OSHA 10 Certified
OSHA Confined Space Entry Certified
NYSDEC DER-25 Certified

Years with LiRo: 17

Years at other firms: 9

PROFESSIONAL PROFILE

Mr. Kreuzer is a LiRo Vice President who has over 26 years of experience in site evaluations, corridor studies, environmental sampling, soil management, supervision of field activities, aquifer testing, groundwater modeling, project coordination, and report development at sites throughout New York State as well as hazardous waste sites, industrial sites, and commercial sites. His experience also includes asbestos, lead, decommissioning/demolition projects, petroleum remediation projects, and industrial waste management projects. He has worked under the New York State Department of Environmental Conservation (NYSDEC) Superfund and at Voluntary Cleanup Program (VCP), Brownfields, Environmental Restoration Program (ERP) and petroleum consent order sites. During his career, he has demonstrated an exceptional ability to manage and coordinate a wide range of environmental projects for public and private sector clients throughout the country, with the majority of the work being located in New York. He has been involved with numerous projects involving Federal agency remedial efforts (i.e., United States Environmental Protection Agency [USEPA], United States Army Corps. Of Engineers [USACE], Air Force Center for Engineering and the Environment [AFCEE]) and NYSDEC site characterization and remediation programs.

EXPERIENCE

New York City Department of Design and Construction (NYCDDC) Bureau of Environmental and Geotechnical Services (BEGS), Requirements Contract for Environmental Services: Project Manager for work-order based contract to perform Phase I/Phase II Environmental Site Assessments (ESAs) and corridor studies in support of NYCDDC property acquisition and corridor rehabilitation projects. More than 150 task orders have been issued and completed. Mr. Kreuzer is the Project Manager responsible for the coordination of field activities and implementation of Phase I ESAs in accordance with ASTM standards. He is also responsible for: the development and implementation of Phase II/Corridor Investigation work plans; and, the review and management of all aspects of the program including records reviews, data acquisition, work plan development, oversight of subsurface investigation work, data review, and report preparation. Mr. Kreuzer also oversees all administrative functions for project tracking and invoicing.

New York City Mayor's Office of Environmental Remediation (MOER) Environmental Consulting Services: Program Manager for a multi-site task order based contract to conduct United States Environmental Protection Agency (USEPA)-compliant Environmental Site Assessments (ESAs) and investigations of brownfield sites for the City of New York MOER under a USEPA Brownfield Grant program. LiRo has also been assigned a petroleum tank audit and tightness testing assignment under this contract to evaluate over 600 petroleum tank systems for compliance with State and Federal regulatory requirements. LiRo is currently performing ESA, Phase II investigations, and petroleum tank audits at more than 20 sites.

NYCDDC Remediation Program, NY DDC PW-348-22, 32, 51: Project Coordinator responsible for coordination of field activities such as collecting monitoring data and evaluating system performance at 30 active remediation sites. Duties included oversight of collection of pilot test data, measurement of groundwater/product levels in wells, collection of remedial system influent and effluent samples, and recording system operating parameters. Mr. Kreuzer also tracks system data and prepares monthly maintenance reports.

NYCPD Environmental Site Assessment and Remedial Design, NY: Project Manager for a multiple site indefinite delivery contract to perform environmental assessments in support of property redevelopment projects conducted by the New York City Department of Housing Preservation and Development (HPD). Mr. Kreuzer managed the investigation and preparation of Phase I ESAs, the implementation of Phase II investigations (including the preparation of HASP and SAP documents), vapor intrusion evaluations and sub-slab vapor barrier system design and



Robert Kreuzer

Vice President/ Project Manager

construction. Projects included spill sites, uncontrolled waste disposal sites, USEPA Brownfield program sites and the investigation of chlorinated solvent groundwater contamination in the 40-block Melrose Commons Urban Renewal Area. The Melrose project was conducted using Triad and involved a cooperative effort between USEPA, NYSDEC, NYSDOH and HPD with LiRo as the lead investigator.

New York State Office of General Services (NYS OGS) Subsurface Soil Investigations, NY: Program Manager for an on-call, work-order based contract to perform comprehensive environmental consulting services for the design and oversight of petroleum bulk storage systems and remediation systems, including tank closure reports, spill investigations, remedial option and work plans, operations and maintenance (O&M) services, and Spill Prevention, Control, and Countermeasure (SPCC) plans, on an immediate response basis throughout the State of New York.

Hunters Point South Waterfront Redevelopment, NY: Project Manager responsible for review and implementation of the Remedial Action Plan (RAP) for development of the Hunters Point South Site in Queens New York. The Site is constructed on made land that was filled in the early 1900s with contaminated fill. LiRo provided design review for soil management, site remediation, infrastructure installation, and Park construction. LiRo has also provided construction Management for the work. Other LiRo responsibilities include community air monitoring, contaminated soil disposition and all ancillary site remedial activities. Early in the demolition phase of the project, petroleum contamination associated with a leaking UST was discovered. LiRo coordinated the spill response with the New York State Department of Environmental Conservation (NYSDEC) and prepared a spill excavation Work Plan that was reviewed and approved by NYSDEC.

Spaulding Fibre ERP Remediation and Demolition, Tonawanda NY: Project Manager responsible for all aspects of comprehensive site ERP investigations, Remedial Alternatives Analysis, remedial design and remedial construction. Mr. Kreuzer also lead the project design and construction management team for the remaining portion of the Spaulding Fibre Plant facility in the City of Tonawanda demolition. The site work was conducted with funding from State, Federal and local sources and Mr. Kreuzer was responsible for ensuring that all funding source requirements were met for the project. He also played a key role in developing innovative abatement/demolition approaches which included a pre-approved asbestos abatement variance that was included in the bidding documents and on-site crushing/recycling of brick and concrete.

NYSDEC Hazardous Waste Standby Contract - PSAs, NY: Project Geologist for the New York State Standby Preliminary Site Assessment of various sites in Allegheny County, New York, for the New York State Department of Environmental Conservation, involving an assessment of the sites' potential for groundwater, surface water, and airborne contamination which could present a threat to public health as well as the environment.

NYSDEC Standby Contract - Utica Harbor Site: Project Geologist for NYSDEC Phase I and II Investigation at Utica Harbor of the NYS Barge and Canal System in Utica, NY. The site investigation included evaluation of the harbor which is affected by runoff from four nearby NYSDEC waste sites (including a Niagara Mohawk MGP site). In addition to sediment and surface water sampling in the harbor, the investigation also included a subsurface evaluation of an adjacent land area that was historically filled with harbor dredge spoils. Contaminants of concern for the site included coal tars, PAHs, cyanide wastes, PCBs and chlorinated solvents. Responsible for field investigation and reporting activities.



Stephen Frank

Senior Environmental Scientist

Education

B.S., Geology, Cleveland State University

Licenses/Registrations:

OSHA 40 Hr. HAZWOPER Certified

OSHA 10 Hr. Certified

Years with LiRo: 16

Years at other firms: 9

PROFESSIONAL PROFILE

Mr. Frank is a Sr. Geologist with more than 25 years of experience in site evaluations, aquifer testing, groundwater modeling, project coordination, environmental sampling, soil management, supervision of field activities, and report development at various hazardous waste sites, industrial sites and commercial sites. He has extensive experience in working with NYSDEC under various brownfield and consent order programs and working on New York City re-development projects under the City Environmental Quality Review program. He has working knowledge of DER 10 and spill guidance manual. He also has specialized experience coordinating field investigation, reporting, and design tasks for multiple-site work order based contracts.

EXPERIENCE

NYCDDC Bureau of Environmental and Geotechnical Services (BEGS), Requirements Contract for Environmental Services, Contract Nos. PW335EPS6/PW311GEN1: Mr. Frank serves as Project Technical Lead and coordinator for work-order based contract to perform Phase I/Phase II Environmental Site Assessments (ESAs), spill investigations, hazardous waste investigations, incinerator wastes, and corridor studies in support of NYCDDC property acquisition and corridor rehabilitation projects. More than 150 task orders have been issued and completed including sites with radioactive waste concerns, drummed hazardous wastes, and petroleum wastes. Responsible for coordinating all aspects of the program including scheduling, client/regulatory agency communications, data acquisition, work plan development, oversight of subsurface investigation work, data review, and report preparation.

New York City Mayor's Office of Environmental Remediation (MOER) Environmental Consulting Services: Project Technical Lead Scientist for a multi-site task order based contract to conduct United States Environmental Protection Agency (USEPA)-compliant Environmental Site Assessments (ESAs) and investigations of brownfield sites for the City of New York MOER under a USEPA Brownfield Grant program. LiRo has also been assigned a petroleum tank audit and tightness testing assignment under this contract to evaluate over 600 petroleum tank systems for compliance with State and Federal regulatory requirements. LiRo is currently performing ESA, Phase II investigations, and petroleum tank audits at more than 20 sites.

New York City Department of Design and Construction (NYCDDC) Remediation Program, DDC PW-348-22, 32, 51: Mr. Frank was the Project Technical Lead Investigator for the implementation of a comprehensive site investigation and remediation program at over New York City owned petroleum spill sites. Duties included development and implementation of work plans and Investigation Summary and Remedial Plans (ISRPs) to comply with NYSDEC consent order, remedial design development, pilot testing, design analysis reporting, compliance monitoring, and system operation/troubleshooting. For each site, LiRo established the nature and extent of contamination, determined the need for site remediation, performed an evaluation of remedial alternative, and recommended site remedies for NYSDEC approval. Upon approval, LiRo's design team prepared Plans and Specification for the approved alternative, provided New York City with bidding assistance, and provided construction oversight for the remedial system construction.

New York City Housing and Preservation Department (NYCHPD) Environmental Site Assessment and Remedial Design, NY: Mr. Frank served as Lead Geologist for a multiple site indefinite delivery contract to perform environmental assessments in support of property redevelopment projects conducted by the NYCHPD. Mr. Frank coordinated the investigation and preparation of Phase I ESAs, the implementation of Phase II investigations (including the preparation of Health and Safety Plan (HASP) and Sample Analysis Plan (SAP) documents), vapor intrusion evaluations, and sub-slab vapor barrier system design and construction. Projects included spill sites, uncontrolled waste disposal sites, USEPA Brownfield program sites, and the



Stephen Frank

Senior Environmental Scientist

investigation of chlorinated solvent groundwater contamination in the 40-block Melrose Commons Urban Renewal Area. The Melrose project was conducted using Triad and involved a cooperative effort between USEPA, NYSDEC, New York State Department of Health (NYSDOH) and NYCHPD with LiRo as the lead investigator.

Hunters Point South Waterfront Redevelopment, NY: Project Scientist responsible for review and implementation of the Remedial Action Plan (RAP) for development of the Hunters Point South Site in Queens New York. The Site is constructed on made land that was filled in the early 1900s with contaminated fill. LiRo provided design review for soil management, site remediation, infrastructure installation, and Park construction. LiRo has also provided construction Management for the work. Other LiRo responsibilities include community air monitoring, contaminated soil disposition and all ancillary site remedial activities. Early in the demolition phase of the project, petroleum contamination associated with a leaking UST was discovered. LiRo coordinated the spill response with the New York State Department of Environmental Conservation (NYSDEC) and prepared a spill excavation Work Plan that was reviewed and approved by NYSDEC. Mr. Frank directed the soil excavation and confirmation sampling work, prepared a spill closure report for submittal to NYSDEC and acquired a spill closure letter for the project owner.

U.S. Air Force - Searsport Pipeline, ME: Project Technical Lead for Environmental Site Assessment (ESA) along 130-mile portion of the Searsport Oil Pipeline. Responsible for development and implementation of phased investigation program which identified potential problem areas, confirmed the presence of contaminants in soil and groundwater, and delineated the extent of contaminants. Supervised field investigations and interpreted/reported data using geographical information system (GIS). Developed remedial alternatives based on ESA results.

Spaulding Fibre Plant Environmental Restoration Program, Tonawanda NY: Project Coordinator responsible for environmental subsurface investigations at a 47-acre former industrial facility. Responsible for development of subsurface investigation work plans, coordination of subcontractor activities, performing subsurface sampling, and interpretation of subsurface conditions and environmental sampling results. Mr. Frank also lead the Project remedial design team effort, developed remedial plans and specifications, provided bid support services, reviewed Contractor submittals and is coordinated the site inspection for a \$3 million site remediation/foundation demolition program. Prepared NYSDEC IRM Construction completion reports, Site Management Plan and Final Engineering Report

Mendon Truck Leasing Site Remediation, NY: Project Scientist responsible for installation, compliance monitoring, troubleshooting, reporting, and closeout of a multi-phase remediation system at a redevelopment site. The system was installed simultaneously with construction of retail facilities at a former trucking company - petroleum spill site. The system was operated for 13 months collecting approximately 700 gallons of product and treating over 480,000 gallons of contaminated groundwater. Mr. Frank was also responsible for completing a Site Closure Investigation, petitioning NYSDEC, and obtained spill closure.

New York Bus Site Remediation, NY: Project Scientist responsible for installation, compliance monitoring, troubleshooting, and corrective action reporting at an active Bus Company parking/maintenance yard in Bronx, NY. The system was installed at a site with complex hydrogeological conditions including bedrock/overburden water bearing zones and tidal influences. The system operates on a manifold system for optimal collection with the tidal cycle and has collected more than 7,000 gallons of diesel fuel.

NYSDEC Standby Contract - North Franklin Street Site, NY: Onsite Coordinator and hydrogeologist for the Remedial Investigation/Feasibility Study at the North Franklin Street Site, Watkins Glen, NY. Supervised all field aspects of RI including GPR survey, soil gas and groundwater screening, monitoring well installation, and 72-hour aquifer testing.



Scott Swanson, PG

Field Staff Supervisor

Education

M.S., Geology, Florida International University

B.S., Geology, Florida International University

Certifications

Airtek 4-hour Mold Awareness

OSHA 10 Certified

OSHA 40 Hazwoper Certified

Years with LiRo: 15

Years at other firms: 20

PROFESSIONAL PROFILE

Mr. Swanson is an Environmental Project manager who has over 35 years of experience in environmental assessments, planning, supervision, and interpretation of hydro-geologic/geotechnical investigations, and report preparation for various sites. Mr. Swanson has provided reconnaissance and inspection services for Phase I/II Environmental Site Assessments (ESAs), and remediation design, monitoring and maintenance, and implementation including monitoring well installations, soil and groundwater sampling, permeability testing, pilot testing for remediation system design, building permit expediting, geotechnical boring oversight, Geoprobe, hollow stem auger (HAS), mud and air rotary drilling methods, geophysical subsurface investigative capabilities, product vacuum remediation, spill response, air monitoring services during asbestos and lead removal, water level monitoring, environmental auditing/oversight, health and safety oversight, vapor barrier inspection during construction, and regulatory compliance sampling for State Pollutant Discharge Elimination System (SPDES) discharge permits.

EXPERIENCE

New York City Health and Hospitals Corporation (HHC):

Provided Project Management support for spill investigation and groundwater monitoring projects performed under two consecutive on-call service contracts since 2008; interface frequently with facility managers to evaluate project scope of work and budget. Worked closely with HHC management and facility representatives in coordinating field work.

New York City Department of Design & Construction, Underground Storage Tank Program, NY:

Mr. Swanson was responsible for conducting pre-design investigations at 32 NYCDDC Underground Storage Tank Facilities. The investigations were conducted to determine the integrity of a Facility UST System and compliance with local, state and federal regulations. Based on the investigations recommendations for upgrade, replacement and/or closure of the systems were made.

New York City Mayor's Office of Environmental Remediation (MOER) Environmental Consulting Services, NY:

Field Coordinator for a multiple site indefinite delivery contract to perform environmental assessments in support of property redevelopment or rehabilitation projects overseen by the NYC MOER under the City's United States Environmental Protection Agency (USEPA) Brownfield Grant. Mr. Swanson completed scope evaluations and field investigations for Phase I ESAs, scoping and implementation of Phase II investigations and site remedial alternatives analysis. Projects included the Queensway rail corridor study, spill sites, industrial sites, transit facility sites, and uncontrolled waste disposal sites.

New York State Office of General Services (NYS OGS) Subsurface Soil Investigations, NY:

Project Geologist for numerous subsurface investigations performed for NYS OGS Structural Engineering Division. Supervised drilling and observation of well installation, geotechnical sampling, and percolation testing at various sites in NYS.

New York City Department of Design & Construction, Remediation, NY:

Mr. Swanson served as the Project Coordinator responsible for four remediation and investigation contracts for NYCDDC. Duties included subcontractor coordination, project management, cost tracking, and contract development. He was also responsible for tracking the progress of investigation and remediation activities until the spill closure is achieved.



Scott Swanson, PG

Field Staff Supervisor

New York City Department of Design and Construction (NYCDDC) Bureau of Environmental and Geotechnical Services (BEGS) Requirements Contract for Environmental Services:

Mr. Swanson oversees the field efforts for Phase I and II corridor assessments of areas of planned utility upgrades for roadways in the five boroughs and has been working on asbestos investigations at various facilities including a former New York City Department of Sanitation (NYCDOS) incinerator plant performing surveys for potential hazardous wastes. Mr. Swanson also performed soil investigations for suitability for tree growth selection in urban settings working with a certified arborist and spill response for various construction sites throughout Manhattan.

New York City Housing Authority, Fuel Oil Tank Replacement, NY:

Mr. Swanson served as Field Coordinator for the removal and installation of the Underground Storage Tank systems for eleven Housing Authority Facilities. Work included the installation of double-walled steel fiberglass jacketed tanks with leak detection, inventory control and tank selection systems. The new fuel oil tanks ranged from 10,000 to 30,000 gal capacities.

Expedited Permit Applications For Various Projects: Tank Installations and New Construction or Upgrades of Fire Dept Facilities:

Mr. Swanson worked with design engineers during site reconnaissance while surveying existing conditions at facilities and utility locations. He also expedited permit applications. Expediting required licensing by NYCDOB and involved pre-filing design drawings and meeting with plan examiners to resolve objections.

JetBlue Airways, Boston, MA:

Mr. Swanson was responsible for air quality testing for a warehouse near Logan Airport using summa canisters in conjunction with a survey of potential hazards for JetBlue's search for a suitable food/drink storage facility.

JFK Airport, Terminal 5 Reconstruction, NY:

Mr. Swanson monitored worker safety in all areas of active excavation. More than 30,000 ft of jet fuel lines (former TWA) were removed and new pipe was installed to accommodate JetBlue's construction of a new 26-gate terminal. All excavation areas were monitored with a PID, and multi-gas (LEL, O₂ & CO₂) meter. His responsibilities included documentation of training and medical surveillance of workers and preparing a daily log of activities and monitoring results.

Russel St, Rochester, NY:

Mr. Swanson investigated soil and ground water contamination at an industrial site with an open spill number on file with NYSDEC. Geo-probe borings were drilled around a heating oil tank, and soils/groundwater was sampled. A report was submitted to NYSDEC recommending closure of spill and tank. Mr. Swanson also coordinated the tank closure with contractor.

New York City Department of Environmental Protection, Pennsylvania and Fountain Ave. Landfills, NY:

Mr. Swanson served as the Lead Geologist and Site Coordinator for the 110 acre peninsula C&D fill mound site on Jamaica Bay requiring field management of three geologists and three technicians. Monitoring well clusters were drilled through hazardous fill to depths greater than 100 ft. Four drilling companies were employed utilizing hollow stem auger rigs, Barber-rigs to set double cased wells, Schramm rigs to set wells in the deeper horizons, and a barge rig to drill offshore borings. Responsibilities included soil gas surveys, surface and subsurface soil sampling, surface water and sediment sampling of Jamaica Bay. Field work was performed on a rigorous schedule from March through October, 1983 to satisfy a consent order by the NYSDEC. Oversight was conducted daily by four NYSDEC monitors and two NYCDEP managers.



Amy Hewson

Senior Environmental Scientist

Education

B.S., Geology/Environmental Science, State University of New York College at Cortland

Licenses/Registrations

NYS DOL Asbestos Project Supervisor

USEPA Lead Risk Assessor

Certifications

OSHA 40 Hazwoper

OSHA 8 Certified

OSHA 10 Certified

ASTM Environmental Assessments for Commercial Real Estate

Years with LiRo: 3

Years at other firms: 15

PROFESSIONAL PROFILE

Ms. Hewson is a Senior Environmental Analyst with over 18 years of experience including managing, coordinating, and supervising environmental investigations and remediation. She has worked primarily on petroleum remediation projects. During her career, she has demonstrated an exceptional ability to manage and coordinate multi-million dollar portfolios. She has been involved with numerous projects involving the New York State Department of Environmental Conservation (NYSDEC), the New York State Thruway Authority (NYSTA), and ExxonMobil Environmental Services (EMES).

Ms. Hewson has been assigned to task-order based contracts performing Phase I and Phase II investigations for property transfer/corridor projects in New York City and New Jersey. Phase I investigations include the collection and evaluation of topographic maps, regulatory database searches, soil/geologic information, historical records, municipal records, aerial photographs, a site reconnaissance, review of all previous site investigation reports, and a report summarizing the findings and recommendations. Phase II investigations include development of a work plan, soil and/or groundwater sampling, testing, and analysis, and reporting of the findings and recommendations.

EXPERIENCE

Liberty Industrial Finishing, Farmingdale, NY Project Geologists responsible for developing site remedial plans to support Town acquisition of a former industrial site and redevelopment of the site for public park use. The site was listed on the National Priorities list and has undergone remediation by the Responsible Party (RP) under United States Environmental Protection Agency (USEPA) supervision. LiRo developed excavation and disposal plans, health and safety plans and the Community Air Monitoring Plan (CAMP) that were implemented for the remedial work. In addition, LiRo prepared a Site Management Plan to ensure that future Park construction and maintenance work is conducted in a manner that is protective of workers, the environment and the surrounding community. LiRo also has developed a final engineering report to summarize all of the work completed by Town of Oyster Bay.

Delta Air Lines Terminal 4 Redevelopment at JFK International Airport: Project Geologist for the environmental remediation phase of Delta's Terminal 4 Redevelopment at JFK. The environmental program included the removal of an underground jet fueling system, the installation of a new fueling system and terminal building as support facilities. The hydrant fueling system work was complicated by the presence of asbestos-wrapped underground fueling system pipe.

JetBlue Phase I/II Site Assessments, Geotechnical Investigations and Terminal 5 Redevelopment at JFK International Airport: Project Geologist for the environmental remediation phase of JetBlue's Terminal 5 Development at JFK. The environmental program included the removal of an underground jet fueling system, the demolition of old jet way and hangar structures and the installation of a new fueling system and terminal building as support facilities. The hydrant fueling system work was complicated by the presence of asbestos-wrapped underground fueling system pipe. LiRo also performed an extensive evaluation of "baseline" subsurface conditions to document the nature and extent of pre-existing contamination for JetBlue to incorporate into their lease agreement with the airport owner.

NYCDDC BEGS Requirements Contract for Environmental Services: Environmental Scientist for work-order based contract to perform Phase I and Phase II Environmental Site Assessments (ESAs) and corridor studies in support of NYCDDC property acquisition and corridor rehabilitation projects. Ms. Hewson has assisted in completing the Phase I ESAs in accordance with ASTM and client-specific standards. Based upon the Phase I results, Ms. Hewson has also developed and implemented Phase II/Corridor Investigation work plans.



Amy Hewson

Senior Environmental Scientist

NYCDCC UST Investigation/Remediation, City-wide New York City: Environmental Scientist responsible for site coordination, investigation, remedial planning and design and post installation system monitoring, evaluation and optimization for a multi-site long-term project with NYC Department of Design and Construction.

NYC Mayor's Office of Environmental Remediation (OER): Environmental Services: Environmental Scientist to perform Phase I and Phase II ESAs in support of OER brownfield programs in NYC. Ms. Hewson has assisted in completing the Phase I ESAs in accordance with ASTM, USEPA Brownfield Assessment Grant Program, and client-specific requirements/standards. Ms. Hewson has also developed and implemented Phase II Investigation work plans.

Monadnock Construction, Inc.: Environmental Services: Environmental Scientist to perform Phase I ESAs on multiple properties. Ms. Hewson has assisted in completing the Phase I ESAs in accordance with ASTM, USEPA All Appropriate Inquiry (AAI), and client-specific requirements/standards.

ExxonMobil Account Project Manager: As the ExxonMobil Environmental Services (EMES) Project Manager for Groundwater and Environmental Services, Inc., Ms. Hewson oversaw, managed, and reviewed all aspects of the EMES retail petroleum remediation account ranging between 21 and 54 projects at various times. She personally managed all aspects of a \$3.4 million dollar remedial excavation, including the coordination with various subcontractors, numerous staff members, the NYSDEC, the NYSTA, and a separate lessee of the facility. The Project Managers role also included developing and tracking annual proposals, change orders, and budgets for all projects within the EMES account totaling over \$5.4 million one year. Ms. Hewson assisted in the development and tracking of an Excel spreadsheet to track monthly spends on each individual project based upon specific categories and forecasted spends on all projects within the account for the next five years. In this role, she had routine communications with the NYSDEC on each project along with other regulators, as needed.

Vice President, Due Diligence Services: As the VP of Due Diligence Services: As the VP of Due Diligence Services for Lender Consulting Services, Inc., Ms. Hewson oversaw, managed, and reviewed Phase I, Transaction Screen, and EAQuick ESAs throughout the Northeastern United States for various lending agencies and private organizations. She has personally performed over 5,000 ESAs throughout the Northeastern United States including the collection and evaluation of topographic maps, computer database searches, soil/geologic information, historical records, municipal records, aerial photographs, site reconnaissance, and review of all previous site investigation reports, if available. In this role, Ms. Hewson developed the Policy and Procedures for the Due Diligence Department (DDD) relative to Phase I, Transaction Screen, and EAQuick ESAs. She also created various report templates dependant on client requirements. As a result of this position, Ms. Hewson has extensive experience with ASTM E1527-00 and E1528-00 Standard Practices for ESAs.



APPENDIX G

STATEMENT OF LIMITATIONS

STATEMENT OF LIMITATIONS

The Phase I CA portion of this report was limited to the review of commercial regulatory database report and Sanborn Fire Insurance Maps and an on-site inspection. The site inspection was limited to observation of exterior surficial conditions only from public right of way only. Such an inspection cannot be expected to reveal all hazardous materials or situations that might be present on-site; some hazardous materials or conditions may exist and not be detected because they are beyond the scope of this study. The investigation was conducted in a manner consistent with that level of care and skill exercised by environmental professionals currently practicing under similar conditions and was based on information made available to the representatives of LiRo. All documents prepared or furnished by LiRo pursuant to this project are to be used in the context of the scope of services contracted. This document is not intended or represented to be suitable for reuse by the client or others on modifications of the project scope. The Phase I CA portion of this report has been prepared for the use of the client and agents thereof.

The data presented and the opinions expressed in this report are qualified as follows:

The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.

LiRo derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the date indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.

In preparing this report, LiRo has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, LiRo has not attempted to verify the accuracy or completeness of any such information.

The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.

Because of the limitations stated above, the findings, observations, and conclusions expressed by LiRo in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings, observations, and conclusions are based solely upon site conditions in existence at the time of investigation.



This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.

EL - Pages

**SPECIFICATIONS FOR THE SPECIALTY
ELECTRICAL WORKS**

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
=====	=====	=====
E 260501	DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT	E-1
E 260519	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS & CABLES	E-3
E 260523	CONTROL-VOLTAGE ELECTRICAL POWER CABLES	E-8
E 260526	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	E-12
E 260529	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	E-17
E 260533	RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS	E-21
E 260543	UNDERGROUND DUCTBANK	E-35
E 260553	IDENTIFICATION FOR ELECTRICAL SYSTEMS	E-44
E 261213	LIQUID-FILLED, MEDIUM-VOLTAGE TRANSFORMERS	E-54
E 262416	PANELBOARDS	E-65
E 263600	MANUAL TRANSFER SWITCHES	E-74
E 264160	GENERATOR RECEPTACLE	E-78
E 409543	PLC & PANEL DEVICES	E-80

SECTION E 260501 – DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT

PART 1 - GENERAL

E 260501.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract apply to this Section.

E 260501.1.2 Description

The work must include the demolition, removal, and disposal of the existing electrical equipment as indicated on the plans, specified, or directed by the Engineer, together with all appurtenances, debris, and refuse of all kinds.

E 260501.1.3 NOT USED

E 260501.1.4 INFORMATIONAL SUBMITTALS

Qualification Data: For persons performing the tasks associated with this Section.

E 260501.1.5 CLOSEOUT SUBMITTALS

None

E 260501.1.6 QUALITY ASSURANCE

Field Observations to ensure laws, ordinances, and other established procedures are followed.

PART 2 - PRODUCTS

None

PART 3 - EXECUTION

E 260501.3.1 LAWS, PERMITS, ETC.

The Contractor must comply with all laws, ordinances, statutes, rules and regulations relating to the demolition of existing equipment; the removal and disposal of materials resulting from demolition operations; the protection of adjacent properties and the general public; and the furnishing and maintenance of passageways, guard fences and other protective facilities. The Contractor must obtain all required permits and licenses, pay all fees and give all notices necessary for the prosecution of the work.

E 260501.3.2 DISPOSAL

All materials resulting from demolition operations or required to be excavated in connection with such operations must be disposed of, by the Contractor, away from the demolition site and the site of the contract work. Said materials must not be dumped, placed, stored or disposed of within the limits of any existing or projected public street or road. The burning of debris or other demolition materials will not be permitted except as approved and authorized by the New York City Fire Department, the New York State Department of Environmental Conservation and the Engineer

E 260501.3.3 DAMAGES

The Contractor must be responsible for all damages resulting from and due to his demolition operations. Said responsibility must include, but not be limited to, walls, structures; and portions of walls and/or structures which are adjacent to the demolition site and are to remain. No additional payment or compensation will be made or allowed the Contractor for costs incurred for repairs and replacements required to satisfactorily remedy the aforesaid damages or for the settlement of any claims resulting there from.

E 260501.3.4 SALVAGE

The City assumes no responsibility for the condition or presence of salvable materials in or on the premises. All damage to or loss of salvable materials, whether by reason of fire, theft or other happening, must be at the risk of the Contractor and no such loss or damage must relieve him from any obligation under the contract or form the basis of any claim against the City.

E 260501.3.5 Fire protection, etc.

The Contractor must furnish, employ and pay for all necessary and legal precautions to adequately protect the work against fire and to safeguard existing structures and the public. The Contractor must at all times maintain adequate facilities for the thorough saturation of all debris and materials with water to the extent required to prevent dust arising from the work. All water used including temporary piping, connections, permits therefore, and removal of piping, when directed, must be provided and paid for by the Contractor.

E 260501.3.6 Blasting

No blasting will be permitted of any demolition items.

E 260501.3.7 Temporary Utilities

- A. The Contractor must furnish, install, and maintain a temporary lighting system such that the roadways and pedestrian walkways of the project area are illuminated to a minimum of 1 foot-candle while the demolition and installation activities are in progress. The temporary lighting system must comply with all applicable codes and regulations for the project area.
- B. The Contractor must maintain existing telecommunications cables such that the connectivity across the project area is maintained while demolition and relocation of utilities is in progress. All system outages must be coordinated with the City of New York and impacted telecommunications Utility to minimize impact. The Contractor is responsible for terminations and splices unless otherwise directed by the City of New York or the telecommunications utility.

PART 4 - MEASUREMENT AND PAYMENT

E 260501.4.1 MEASUREMENT

The measurement of the demolition is a lump sum that includes, but is not limited to, the following costs:

1. Waste metal weight from the electrical equipment
2. Waste concrete, reinforcing bar, and other components & materials from the foundation removal
3. Waste insulating liquids from the electrical equipment
4. Wasted metals from the removal of fencing
5. Movement of Materials to pertinent recycling centers
6. Movement of Materials to pertinent landfills

E 260501.4.2 PRICE TO COVER

The lump sum price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The bid price will include, but not be limited to, the following:

1. Removal and disposal of existing electrical equipment in an environmentally safe manner.
2. Removal and disposal of existing equipment and fencing foundations in an environmentally safe manner.
3. Removal and disposal of existing fencing in an environmentally safe manner.

Payment will be made under:

Item No.	Description	Pay Unit
E 260501	DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT	LUMP SUM

END OF SECTION E 260501

SECTION E 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

E 260519.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract apply to this Section.

E 260519.1.2 SUMMARY

1. Section Includes:
 1. Copper building wire rated 600 V or less.
 2. Connectors, splices, and terminations rated 600 V and less.
2. Related Requirements:
 1. Section E 260523 "Control-Voltage Electrical Power Cables" for control systems communications cables and Classes 1, 2, and 3 control cables.

E 260519.1.3 DEFINITIONS

RoHS: Restriction of Hazardous Substances.

E 260519.1.4 ACTION SUBMITTALS

Product Data: For each type of product.

E 260519.1.5 INFORMATIONAL SUBMITTALS

1. Certified field quality-control reports.
2. Length of cables for each feeder on project, including cabling to distribution equipment (switchgear, switchboards, distribution panelboards, panelboards, busway, etc.), and 3-phase motors. (Branch circuits are not included in the requirement.) Include both estimated lengths used for bidding and actual length installed, for use in short-circuit, coordination and arc flash hazard studies.

PART 2 - PRODUCTS

E 260519.2.1 COPPER BUILDING WIRE

- A. Description: Flexible, insulated and uninsulated, drawn copper current-carrying conductor with an overall insulation layer or jacket, or both, rated 600 V or less
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Alpha Wire Company. 711 Lidgerwood Ave, Elizabeth, NJ 07202. <https://www.alphawire.com/> (908) 925-8000
 2. Viakable Manufacturing LLC. 2969 Chartres St, La Salle, IL 61301. (815) 224-3422
 3. Belden Inc. 1 N. Brentwood Blvd. 15th Floor, St. Louis, MO 63105. <https://www.belden.com/> (314) 854-8000.
 4. Cerro Wire LLC. 1099 Thompson Rd SE, Hartselle, AL 35640. <https://www.cerrowire.com/> (256) 773-2522.
 5. Encore Wire Corporation. 1329 Millwood Rd, McKinney, TX 75069. <https://www.encorewire.com/> (972) 562-9473.
 6. General Cable Technologies Corporation. 4 Tesseneer Road Highland Heights, KY 41076 (859) 572-8000.
 7. Okonite Company (The). 102 Hilltop Road Ramsey, New Jersey 07446. <https://www.okonite.com/> (201) 825-0300.
 8. Service Wire Co. 310 Davis Road, Culloden, WV 25510. <https://www.servicewire.com/> (800) 624.3572.
 9. Southwire Company. One Southwire Drive, Carrollton, GA 30119. <https://www.southwire.com/> (770) 832-4529.
 10. WESCO. 225 West Station Square Drive, Suite 700, Pittsburgh, PA 15219. <https://www.wesco.com/> (412) 454-2200.
- C. Standards:

1. Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.
 2. RoHS compliant.
- D. Conductor and Cable Marking: Comply with wire and cable marking according to UL's "Wire and Cable Marking and Application Guide."
- E. Conductors: Copper, complying with ASTM B 3 for bare annealed copper and with ASTM B 8 ASTM B 496 for stranded conductors.
- F. Conductor Insulation:
1. Comply with NEMA WC 70/ICEA S-95-658.
 2. Type XHHW: Comply with UL 83.
- E 260519.2.2 CONNECTORS AND SPLICES
- A. Description: Factory-fabricated connectors, splices, and lugs of size, ampacity rating, material, type, and class for application and service indicated; listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. 3M Electrical Products. 13011 McCallen Pass Building C, Austin, TX 78753. <https://www.3m.com/> (800) 245-3573.
 2. AFC Cable Systems; a part of Atkore International. 960 Flaherty Drive, New Bedford, MA 02745. <https://www.afcweb.com/> (800) 757-6996.
 3. FCI - Burndy Products. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/burndy/En>
 4. Gardner Bender. 16250 W Woods Edge Rd, New Berlin WI 53151 USA. <https://www.gardnerbender.com/> (800) 624-4320.
 5. Hubbell Power Systems, Inc. 210 N. Allen Centralia, MO 65240 USA. <https://www.hubbell.com/hubbellpowersystems/> (573) 682-5521.
 6. Ideal Industries, Inc. 1375 Park Ave. Sycamore, IL 60178 USA. <https://www.idealindustries.com/> (815) 895-5181.
 7. ILSCO. 4730 Madison Road, Cincinnati, OH 45227. <https://www.ilsco.com/ilsco> (800) 776-9775.
 8. NSi Industries LLC. 9730 Northcross Center Court, Huntersville, NC 28078 USA. <https://www.nsiindustries.com/> (800)321.5847
 9. O-Z/Gedney; a brand of Emerson Industrial Automation. 9377 W Higgins Rd, Rosemont, IL 60018. <https://www.appleton.emerson.com/en-us/o-z-gedney> (847) 268-6000.
 10. Service Wire Co. 310 Davis Road, Culloden, WV 25510. <https://www.service-wire.com/> (800) 624.3572.
 11. TE Connectivity Ltd. <https://www.te.com/> (800) 522 6752.
 12. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
- C. Jacketed Cable Connectors: For steel and aluminum jacketed cables, zinc die-cast with set screws, designed to connect conductors specified in this Section.
- D. Duplex connectors for Type AC and Type MC cable, permitting termination of (2) cables per fitting, are not acceptable.
- E. Lugs: One piece, seamless, designed to terminate conductors specified in this Section.
1. Material: Copper or Aluminum as required for conductor material.
 2. Type: One or Two hole with standard or long barrels as required.
 3. Termination: Compression.

PART 3 - EXECUTION

E 260519.3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Stranded copper for feeders smaller than No. 4 AWG; stranded copper or aluminum for feeders No. 4 AWG and larger. Conductors shown on drawings are sized as copper. Provide aluminum conductors with equivalent ampacity and impedance to copper conductors shown on drawings. Increased conductor, lug, and conduit fill sizing are responsibility of Electrical Contractor. Note that lugs must be suitable for aluminum regarding size and material.
- B. Branch Circuits: Stranded copper.
- C. Power-Limited Control: Solid for No. 12 AWG and smaller.

E 260519.3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- A. Service Entrance: Type XHHW, single conductors in raceway
- B. Exposed Feeders: Type XHHW, single conductors in raceway.
- C. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type XHHW, single conductors in raceway.
- D. Exposed Branch Circuits, Including in Crawlspace: Type XHHW, single conductors in raceway.
- E. Coordinate "Branch Circuits Concealed in Concrete, be Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type XHHW, single conductors in raceway

E 260519.3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Do not use conductors smaller than No. 12 AWG for branch circuit wiring.
- B. Complete raceway installation between conductor and cable termination points according to Section 260533 "Raceways and Boxes for Electrical Systems" prior to pulling conductors and cables. Install wiring after concrete and masonry work is complete and after moisture is swabbed from conduit.
- C. Make conductor lengths for parallel feeders identical.
- D. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- E. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- F. Install exposed cables parallel and perpendicular to surfaces of exposed structural members and follow surface contours where possible.
- G. Support cables according to Section 260529 "Hangers and Supports for Electrical Systems." Secure cables at not more than 30 inch (760 mm) intervals, nor more than 6 inches (150 mm) from boxes, cabinets, racks, outlets, etc.
- H. Lace or clip groups of feeder conductors at distribution centers, pull-boxes and wireways.
- I. Use No. 10 AWG minimum wire size from panelboard to first outlet for any 277 volt branch circuit exceeding 125 feet between branch circuit panel and first outlet, and for any 120 volt branch circuit exceeding 75 feet between branch circuit panel and first outlet. Increase wire size one size for each additional 125 feet of length for any 277 volt branch circuit, and for each additional 75 feet of length for any 120 volt branch circuit, and adjust conduit size as required.
- J. Based upon final feeder or branch circuit routing, up-size conductors to provide a maximum voltage drop of 2 percent for feeders and 3 percent for branch circuits, and a maximum voltage drop on both feeders and branch circuits of 5 percent, as described in NEC Articles 210.19A and 215.2A1 information notes.

- K. De-rate branch circuit conductors for multiple home-runs sharing a single raceway per NEC Article 310.
- L. Provide an individual neutral conductor for each phase conductor of branch circuits. Common neutral conductors are NOT allowed.
- M. Provide separate neutral conductors for dimmer controlled lighting circuits.
- N. Install only switch legs in conduits to switch boxes. Do NOT route power supply conductors through lighting switch boxes.
- O. Install stand-by system wiring in separate raceways from all other systems.
- P. Install receptacle and lighting circuits in separate raceways.
- Q. Install 208/120V and 480/277V circuits in separate raceways.
- R. Make connections only in junction, pull and outlet boxes; terminal cabinets; and equipment enclosures.
- S. Visually inspect, then test all feeders for grounds and short circuits prior to energizing the cable. Replace defective runs or repair them.

E 260519.3.4 CONNECTIONS

- A. Use screw on wire connector for copper conductor sizes No. 10 gauge and smaller except at motor connections. Use tool applied compression or split bolt type for all motor connections and for conductors larger than #10. Protect compression and split bolt type splices with suitable electrical tape.
- B. Size all connectors to match cable size.
- C. Use tools recommended by vendor for applying pressure connectors.
- D. Suitable terminal lugs that are factory installed on equipment may be used for terminating cables.
- E. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- F. Make splices, terminations, and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- G. Splice only in accessible junction or outlet boxes.
- H. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches (150 mm) of slack.

E 260519.3.5 IDENTIFICATION

- A. Identify and color-code conductors and cables according to Section 260553 "Identification for Electrical Systems."
- B. Identify each spare conductor at each end with identity number and location of other end of conductor, and identify as spare conductor.

E 260519.3.6 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
- B. After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors for compliance with requirements.
 1. Perform each of the following visual and electrical tests:
 - a. Verify conductor and cable data matches drawing and specification requirements.
 - b. Inspect exposed sections of conductor and cable for physical damage and correct connection according to the single-line diagram.
 - c. Test bolted connections for high resistance using one of the following:
 - 1) A low-resistance ohmmeter.
 - 2) Calibrated torque wrench.
 - 3) Thermographic survey.

- d. Inspect compression-applied connectors for correct cable match and indentation.
 - e. Inspect for correct identification.
 - f. Inspect cable jacket and condition.
 - g. Insulation-resistance test on each conductor for ground and adjacent conductors. Apply a potential of 500-V dc for 300-V rated cable and 1000-V dc for 600-V rated cable for a one-minute duration.
 - h. Continuity test on each conductor and cable.
 - i. Uniform resistance of parallel conductors.
 - j. Verify color coding meets specification requirements.
2. Initial Infrared Scanning: After Substantial Completion, but before Final Acceptance, perform an infrared scan of each connection or splice in conductors No. 3 AWG and larger. Remove box and equipment covers so connections or splices are accessible to portable scanner. Correct deficiencies determined during the scan.
- a. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - b. Record of Infrared Scanning: Prepare a certified report that identifies connections or splices checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.
- C. Follow Infrared Scanning: Perform an additional follow-up infrared scan of each connection or splice 11 months after date of Substantial Completion.
- D. C Cables will be considered defective if they do not pass tests and inspections.
- E. Prepare test and inspection reports to record the following:
- 1. Procedures used.
 - 2. Results that comply with requirements.
 - 3. Results that do not comply with requirements, and corrective action taken to achieve compliance with requirements.

PART 4 - BASIS OF PAYMENT

E 260519.4.1 MEASUREMENT

The unit of measurement for the LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES shall be per LINEAR-FOOT.

E 260519.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance and equipment necessary to satisfactorily complete the work. Terminations and termination kits are considered included in the unit pricing for conductors and cables.

Payment will be made under:

Item No.	Description	Pay Unit
E 260519 A	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 3/0 AWG WIRE)	LINEAR-FOOT
E 260519 D	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 6 AWG WIRE)	LINEAR-FOOT
E 260519 E	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 8 AWG WIRE)	LINEAR-FOOT
E 260519 F	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (NO. 12 AWG WIRE)	LINEAR-FOOT

END OF SECTION E 260519

SECTION E 260523 - CONTROL-VOLTAGE ELECTRICAL POWER CABLE**PART 1 - GENERAL****E 260523.1.1 RELATED DOCUMENTS**

Drawings and general provisions of the Contract apply to this Section.

E 260523.1.2 SUMMARY

- A. Section Includes:
 1. Category 6 balanced twisted pair cable.
 2. Control cable.
- B. Related Requirements:

E 260523.1.3 ACTION SUBMITTALS

Product Data: For each type of product.

E 260523.1.4 INFORMATIONAL SUBMITTALS

- A. Source quality-control reports.
- B. Field quality-control reports.

PART 2 - PRODUCTS**E 260523.2.1 PERFORMANCE REQUIREMENTS**

Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

E 260523.2.2 CATEGORY 6 BALANCED TWISTED PAIR CABLE

- A. Description: Four-pair, balanced-twisted pair cable, certified to meet transmission characteristics of Category 6 cable at frequencies up to 250 MHz.
- B. Manufacturers:
 1. ADC Krone & CommScop. <https://www.commscope.com/adc-krone/> (800) 554-2204.
 2. Belden Inc. 1 N. Brentwood Blvd. 15th Floor, St. Louis, MO 63105. <https://www.belden.com/> (314) 854-8000.
 3. Panduit. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487. <https://www.panduit.com/> (800) 777-3300.
- C. Standard: Comply with NEMA WC 66/ICEA S-116-732 and TIA-568-C.2 for Category 6 cables.
- D. Conductors: 100 ohm, No. 23 AWG solid copper.
- E. Shielding/Screening: Shielded twisted pairs (FTP)
- F. Cable Rating: Riser
- G. Jacket: Gray thermoplastic.

E 260523.2.3 CONTROL-CIRCUIT CONDUCTORS

- A. Manufacturers:
 1. Okonite. 102 Hilltop Road Ramsey, New Jersey 07446. <https://www.okonite.com/> (201) 825-0300.
 2. Southwire Company. One Southwire Drive, Carrollton, GA 30119. <https://www.southwire.com/> (770) 832-4529.
 3. Belden Inc. 1 N. Brentwood Blvd. 15th Floor, St. Louis, MO 63105. <https://www.belden.com/> (314) 854-8000.
- B. Class 1 Control Circuits: Stranded copper, Type XHHW, complying with UL 44 in raceway or Type TC, complying with UL 1277 in raceway.

E 260523.2.4 SOURCE QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to evaluate cables.
- B. Factory test twisted pair cables according to TIA-568-C.2.

- C. Cable will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

PART 3 - EXECUTION

E 260523.3.1 EXAMINATION

Test cables on receipt at Project site.

E 260523.3.2 INSTALLATION OF RACEWAYS AND BOXES

- A. Comply with requirements in Section 260533 "Raceways and Boxes for Electrical Systems" for raceway selection and installation requirements for boxes, conduits, and wireways as supplemented or modified in this Section.
 1. Outlet boxes must be no smaller than 2 inch (50 mm) wide, 3 inch (75 mm) high, and 2-1/2 inch (64 mm) deep.
- B. Comply with TIA-569-D for pull-box sizing and length of conduit and number of bends between pull points.
- C. Install manufactured conduit sweeps and long-radius elbows if possible.

E 260523.3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Comply with NECA 1.
- B. General Requirements for Cabling:
 1. Comply with TIA-568-C Series of standards.
 2. Comply with BICSI ITSIMM, Ch. 5, "Copper Structured Cabling Systems."
 3. Terminate all conductors; cable must not contain unterminated elements. Make terminations only at indicated outlets, terminals, and cross-connect and patch panels.
 4. Cables may not be spliced and must be continuous from terminal to terminal. Do not splice cable between termination, tap, or junction points.
 5. Cables serving a common system may be grouped in a common raceway. Install network cabling and control wiring and cable in separate raceway from power wiring. Do not group conductors from different systems or different voltages.
 6. Secure and support cables at intervals not exceeding 30 inches (760 mm) and not more than 6 inches (150 mm) from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
 7. Bundle, lace, and train conductors to terminal points without exceeding manufacturer's limitations on bending radii, but not less than radii specified in BICSI ITSIMM, Ch. 5, "Copper Structured Cabling Systems." Install lacing bars and distribution spools.
 8. Do not install bruised, kinked, scored, deformed, or abraded cable. Remove and discard cable if damaged during installation and replace it with new cable.
 9. Cold-Weather Installation: Bring cable to room temperature before dereeling. Do not use heat lamps for heating.
 10. Pulling Cable: Comply with BICSI ITSIMM, Ch. 5, "Copper Structured Cabling Systems." Monitor cable pull tensions.
 11. Support: Do not allow cables to lie on removable ceiling tiles.
 12. Secure: Fasten securely in place with hardware specifically designed and installed so as to not damage cables.
 13. Provide strain relief.
 14. Keep runs short. Allow extra length for connecting to terminals. Do not bend cables in a radius less than 10 times the cable OD. Use sleeves or grommets to protect cables from vibration at points where they pass around sharp corners and through penetrations.
 15. Ground wire must be copper, and grounding methods must comply with IEEE C2. Demonstrate ground resistance.
- C. Installation of Control-Circuit Conductors:

1. Install wiring in raceways.
2. Use insulated spade lugs for wire and cable connection to screw terminals.
3. Comply with requirements specified in Section 260533 "Raceways and Boxes for Electrical Systems."
4. Separation between Communications Cables and Electrical Motors and Transformers, 5 kVA or 5 HP and Larger: A minimum of 48 inch (1200 mm).

E 260523.3.4 REMOVAL OF CONDUCTORS AND CABLES

Remove abandoned conductors and cables. Abandoned conductors and cables are those installed that are not terminated at equipment and are not identified with a tag for future use.

E 260523.3.5 CONTROL-CIRCUIT CONDUCTORS

Minimum Conductor Sizes:

1. Remote-control and signal circuits; No 14 AWG.

E 260523.3.6 IDENTIFICATION

- A. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."
- B. Identify data and communications system components, wiring, and cabling according to TIA-606-B; label printers must use label stocks, laminating adhesives, and inks complying with UL 969.
- C. Identify each wire on each end and at each terminal with a number-coded identification tag. Each wire must have a unique tag.

E 260523.3.7 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. Visually inspect cable jacket materials for UL or third-party certification markings. Inspect cabling terminations to confirm color-coding for pin assignments, and inspect cabling connections to confirm compliance with TIA-568-C.1.
2. Visually inspect cable placement, cable termination, grounding and bonding, equipment and patch cords, and labeling of all components.
3. Test cabling for direct-current loop resistance, shorts, opens, intermittent faults, and polarity between conductors. Test operation of shorting bars in connection blocks. Test cables after termination, but not after cross-connection.
 - a. Test instruments must meet or exceed applicable requirements in TIA-568-C.2. Perform tests with a tester that complies with performance requirements in its "Test Instruments (Normative)" Annex, complying with measurement accuracy specified in its "Measurement Accuracy (Informative)" Annex. Use only test cords and adapters that are qualified by test equipment manufacturer for channel or link test configuration.

B. Document data for each measurement. Print data for submittals in a summary report that is formatted using Table 10.1 in BICSI TDMM as a guide or transfer the data from the instrument to the computer, save as text files, print, and submit.

C. End-to-end cabling will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

PART 4 - BASIS OF PAYMENT

E 260523.4.1 MEASUREMENT

The unit measurement of the CONTROL-VOLTAGE ELECTRICAL POWER CABLE shall be PER LINEAR-FOOT.

E 260523.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. Termination and termination kits are considered included in the unit pricing of conductors and cables. The price bid will include, but not be limited to, the following:

1. #14AWG Control Cable

Payment will be made under:

Item No.	Description	Pay Unit
E 260523 A	#14 AWG CONTROL CABLE	LINEAR-FOOT

END OF SECTION E 260523

SECTION E 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS**PART 1 - GENERAL****E 260526.1.1 RELATED DOCUMENTS**

Drawings and general provisions of the Contract apply to this Section.

E 260526.1.2 SUMMARY

Section includes grounding and bonding systems and equipment.

1. Underground distribution grounding.
2. Foundation steel electrodes.

E 260526.1.3 ACTION SUBMITTALS

Product Data: For each type of product indicated.

E 260526.1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Plans showing dimensioned locations of grounding features specified in "Field Quality Control" Article, including the following:

1. Ground rods.
2. Ground rings.

- B. Certified field quality-control reports.

E 260526.1.5 CLOSEOUT SUBMITTALS

Operation and Maintenance Data: For grounding to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in the general provisions, include the following:
 - a. Plans showing as-built, dimensioned locations of grounding features specified in "Field Quality Control" Article, including the following:
 - 1) Ground rods.
 - 2) Ground rings.
 - b. Instructions for periodic testing and inspection of grounding features at grounding connections for separately derived systems based on NFPA 70B.
 - 1) Tests must determine if ground-resistance or impedance values remain within specified maximums, and instructions must recommend corrective action if values do not.
 - 2) Include recommended testing intervals.

PART 2 - PRODUCTS**E 260526.2.1 SYSTEM DESCRIPTION**

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

- B. Comply with UL 467 for grounding and bonding materials and equipment.

E 260526.2.2 MANUFACTURERS

Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Burndy; Part of Hubbell Electrical Systems. <https://www.hubbell.com/burndy/en>
2. Dossert; AFL Telecommunications LLC. (800) 235-3423.
3. ERICO International Corporation. 34600 Solon Road, Solon, Ohio 44139 United States. (800) 753-9221
4. Fushi Copperweld Inc. <https://www.copperweld.com/> (615) 440-0064
5. Galvan Industries, Inc.; Electrical Products Division, LLC. 7320 Galvan Way (formerly Millbrook Rd), Harrisburg, NC 28075. <https://galvanelectrical.com/> (704) 455-5102.
6. Harger Lightning & Grounding. 301 Ziegler Dr, Grayslake, IL 60030. <https://www.harger.com/> (800) 842-7437.

7. ILSCO. 4730 Madison Road, Cincinnati, OH 45227. <https://www.ilsco.com/ilsco> (800) 776-9775.
8. O-Z/Gedney; a brand of Emerson Industrial Automation. 9377 W Higgins Rd, Rosemont, IL 60018. <https://www.appleton.emerson.com/en-us/o-z-gedney> (847) 268-6000.
9. Robbins Lightning, Inc. 124 E 2nd St, Maryville, MO 64468. <https://www.robbinslightning.com/> (660) 582-3156.
10. Siemens. 300 New Jersey Avenue Suite 1000, Washington D.C. 20001. <https://www.siemens.com/> +1(800) 743-6367.
11. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.

E 260526.2.3 CONDUCTORS

- A. Insulated Conductors: Copper or tinned-copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
 1. Stranded Conductors: ASTM B 8.
 2. Tinned Conductors: ASTM B 33.
 3. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.

E 260526.2.4 CONNECTORS

- A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.
- B. Underground Connectors: Cadweld exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions, or Burndy Hyground irreversible compression-type, UL listed, except in ground test wells which require heavy-duty UL listed, bolted connections.
- C. Beam Clamps: Mechanical type, terminal, ground wire access from four directions, with dual, tin-plated or silicon bronze bolts.
- D. Cable-to-Cable Connectors: Compression type, copper or copper alloy.
- E. Conduit Hubs: Mechanical type, terminal with threaded hub.
- F. Ground Rod Clamps: Exothermic Weld type, copper or copper alloy.
- G. Lay-in Lug Connector: Mechanical type, copper rated for direct burial terminal with set screw.
- H. Straps: Solid copper, cast-bronze clamp copper lugs. Rated for 600 A.
- I. U-Bolt Clamps: Mechanical type, copper or copper alloy, terminal listed for direct burial.

E 260526.2.5 GROUNDING ELECTRODES

Ground Rods: Copper-clad steel, sectional type; 3/4 inch by 10 feet.

PART 3 - EXECUTION

E 260526.3.1 APPLICATIONS

- A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.
- B. Underground Grounding Conductors: Install bare tinned-copper conductor, No. 4/0 AWG minimum.
 1. Bury at least 24 inches below grade.
- C. Conductor Terminations and Connections:
 1. Equipment Grounding Conductor Terminations: Bolted connectors.
 2. Underground Connections: Welded or irreversible compression-type connectors except as otherwise indicated.
 3. Connections to Structural Steel: Welded connectors.

E 260526.3.2 GROUNDING AT THE SERVICE

Equipment grounding conductors and grounding electrode conductors must be connected to the ground bus. Install a main bonding jumper between the neutral and ground buses.

E 260526.3.3 GROUNDING SEPARATELY DERIVED SYSTEMS

Generator: Install grounding electrode(s) at the generator location. The electrode must be connected to the equipment grounding conductor and to the frame of the generator.

E 260526.3.4 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

- A. Comply with IEEE C2 grounding requirements.
- B. Grounding Manholes and Handholes: Install a driven ground rod through manhole or handhole floor, close to wall, and set rod depth so 4 inches will extend above finished floor. If necessary, install ground rod before manhole is placed and provide No. 1/0 AWG bare, tinned-copper conductor from ground rod into manhole through a waterproof sleeve in manhole wall. Protect ground rods passing through concrete floor with a double wrapping of pressure-sensitive insulating tape or heat-shrunk insulating sleeve from 2 inches above to 6 inches below concrete. Seal floor opening with waterproof, non-shrink grout.
- C. Grounding Connections to Manhole Components: Bond exposed-metal parts such as inserts, cable racks, pulling irons, ladders, and cable shields within each manhole or handhole, to ground rod or grounding conductor. Make connections with No. 4 AWG minimum, stranded, hard-drawn copper bonding conductor. Train conductors level or plumb around corners and fasten to manhole walls. Connect to cable armor and cable shields according to written instructions by manufacturer of splicing and termination kits.
- D. Pad-Mounted Transformers and Switches: Install three ground rods separated by at least twenty (20) feet, and ground ring around the pad. Ground pad-mounted equipment and noncurrent-carrying metal items associated with substations by connecting them to underground cable and grounding electrodes. Install No. 4/0 AWG tinned-copper conductor for ground ring and for taps to equipment grounding terminals. Route taps in one inch (25 mm) nonmetallic conduit from two points on ground ring. Bury ground ring not less than 6 inches from the foundation.

E 260526.3.5 EQUIPMENT GROUNDING

Install insulated equipment grounding conductors with all feeders and branch circuits.

E 260526.3.6 INSTALLATION

- A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Ground Rods: Drive rods until tops are 2 inches below finished floor or final grade unless otherwise indicated.
 - 1. After completion of individual ground rod resistance tests, interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.
 - 2. Use exothermic welds for all below-grade connections.
- C. B. For grounding electrode system, install at least three ground rods separated by at least twenty (20) feet from each other and located at least the same distance from other grounding electrodes, and interconnected with No. 4/0 AWG bare grounding conductors and from two points on grid to ground bus in service equipment.
- D. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.
 - 1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.

2. Building Expansion Joints and Conduit Expansion Fittings: Install bonding jumper to maintain continuous ground continuity.
 3. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
 4. Use exothermic-welded or irreversible compression-type connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.
- E. Ground Ring: Install a grounding conductor, electrically connected to each building structure ground rod and to each indicated item, extending around the perimeter of building.
1. Install No. 4/0 AWG tinned-copper conductor for ground ring and for taps to building columns.
 2. Bury ground ring not less than 24 inches (600 mm) from building's foundation.
- F. Connections: Make connections so possibility of galvanic action or electrolysis is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact are galvanically compatible.
1. Use electroplated or hot-tin-coated materials to ensure high conductivity and to make contact points closer in order of galvanic series.
 2. Make connections with clean, bare metal at points of contact.
 3. Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
 4. Make aluminum-to-galvanized-steel connections with tin-plated copper jumpers and mechanical clamps.
 5. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

E 260526.3.7 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
- B. Tests and Inspections:
 1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
 2. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.
 3. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, and at individual ground rods. Make tests at ground rods before any conductors are connected.
 - a. Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
 - b. Perform tests by fall-of-potential method according to IEEE 81.
 - c. Measurement of ground grid and building ground ring resistance must be accomplished using AVO Biddle's Slope Method where rods have been connected to grids or building ground rings prior to testing. If measurements do not meet requirements cited above, take corrective action as required. Re-measure grid resistance to ground until acceptable values are achieved.
 4. Prepare dimensioned Drawings locating each test well, ground rod and ground-rod assembly, and other grounding electrodes. Identify each by letter in alphabetical order, and key to the record of tests and observations. Include the number of rods driven and their depth at each location, and include observations

of weather and other phenomena that may affect test results. Describe measures taken to improve test results.

- C. Grounding system will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.
- E. Measured ground resistances must not exceed 5 Ohms.

- F. See the Evaluations for discussion on appropriate ground-resistance values. Typical maximum permitted values are listed below for different grounding applications; retain applicable subparagraphs and revise to suit Project. Coordinate with requirements in Sections specifying equipment to be grounded.

- G. Excessive Ground Resistance: If resistance to ground exceeds specified values, install additional ground rods and conductors as required. Re-measure grid resistance to ground until acceptable values are achieved.

PART 4 - BASIS OF PAYMENT

E 260526.4.1 MEASUREMENT

The measurement includes of grounding conductor will be measured by LINEAR-FOOT and shall include ground ring conductor, trenching, backfill, site restoration, and other required materials and components. The unit of measurement for GROUND RODS will be per EACH ground rod furnished and installed.

E 260526.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. This is not limited to, the procurement, shipment, insurance, and installation of ground rods, ground ring conductor, all required mechanical connectors and termination kits, exothermic welds, and other required appurtenances. Mechanical connectors, termination kits, exothermic welds, system testing, and other required materials and components are considered included in the unit pricing for the below listed pay items. The price bid will include but not be limited to, the following:

1. Ground Rods
2. Ground Ring Conductor

Payment will be made under:

Item No.	Description	Pay Unit
E 260526	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	LINER-FOOT
E 260526 D	GROUND RODS	EACH

END OF SECTION E 260526

SECTION E 260529 – HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

E 260529.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract apply to this Section.

E 260529.1.2 SUMMARY

A. Section Includes:

1. Steel slotted support systems.
2. Conduit and cable support devices.
3. Support for conductors in vertical conduit.
4. Mounting, anchoring, and attachment components, including powder-actuated fasteners, mechanical expansion anchors, concrete inserts, clamps, through bolts, toggle bolts, and hanger rods.

B. Related Requirements:

E 260529.1.3 ACTION SUBMITTALS

Delegated-Design Submittal: For hangers and supports for electrical systems.

1. Include design calculations and details of hangers.

E 260529.1.4 INFORMATIONAL SUBMITTALS

Welding certificates.

E 260529.1.5 QUALITY ASSURANCE

Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M.

PART 2 - PRODUCTS

E 260529.2.1 PERFORMANCE REQUIREMENTS

Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design hanger and support system.

E 260529.2.2 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

- A. Steel Slotted Support Systems: Preformed steel channels and angles with minimum 13/32-inch- (10-mm-) diameter holes at a maximum of 8 inches (200 mm) on center in at least one surface.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Allied Tube & Conduit; a part of Atkore International. 16100 South Lathrop Avenue Harvey, IL 60426. <https://www.alliedeq.us/> (800) 882-5543.
 - b. B-line, an Eaton business. <https://www.eaton.com/us/en-us/products/support-systems/bl-transition.html> +1(800) 386-1911.
 - c. ERICO International Corporation. 34600 Solon Road, Solon, Ohio 44139 United States. (800) 753-9221.
 - d. Flex-Strut Inc. 2900 Commonwealth Avenue NE, Warren, OH 44483. <https://www.flexstrut.com/> (330) 372-9999.
 - e. GS Metals Corp. 3764 Longspur Rd. Pinckneyville, IL, US 62274-3103. (618) 357-5353.
 - f. G-Strut by Gregory Industries. 4100 13th St SW, Canton, OH 44710. <https://www.gregorycorp.com/gregory-strut> (330) 477-4800.
 - g. Haydon Corporation. 415 Hamburg Turnpike, Wayne, NJ 07470. (800) 242-9366.
 - h. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.

- i. Unistrut; Part of Atkore International. 16100 S. Lathrop Ave, Harvey, IL 60426. <https://www.unistrut.us/> (800) 882-5543.
 - j. Wesanco, Inc. 16404 Knott Ave, La Mirada, CA 90638. (714) 739-4989.
 - 2. Standard: Comply with Metal Framing Manufacturer's Association Standard MFMA-4 factory-fabricated components for field assembly.
 - 3. Material for Channel, Fittings, and Accessories: Galvanized steel.
 - 4. Channel Width: Selected for applicable load criteria.
 - 5. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
 - 6. Protect finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Conduit and Cable Support Devices: Steel and malleable-iron Stainless-steel hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- C. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for nonarmored electrical conductors or cables in riser conduits. Plugs must have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body must be made of malleable iron.
- D. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M steel plates, shapes, and bars; black and galvanized.
- E. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
- 1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Hilti, Inc. <https://www.hilti.com/> +1(800) 879-8000
 - 2) ITW Ramset/Red Head; Illinois Tool Works, Inc. 155 Harlem Ave, Glenview, IL 60025. <https://www.itwredhead.com/> (800) 848-5611.
 - 3) MKT Fastening, LLC. 1 Gunnebo Dr, Lonoke, AR 72086. <https://www.mktfastening.com/> (501) 676-2222.
 - 4) Simpson Strong-Tie Co., Inc. <https://www.strongtie.com/> (800) 999-5099
 - 2. Mechanical-Expansion Anchors: Insert-wedge-type, stainless steel, for use in hardened portland cement concrete, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) B-line, an Eaton business. <https://www.eaton.com/us/en-us/products/support-systems/bl-transition.html> +1(800) 386-1911.
 - 2) Empire Tool and Manufacturing Co., Inc. <https://www.empireindustries.com/> 180 Olcott Street, Manchester, CT, 06040. (860) 647-1431.
 - 3) Hilti, Inc. <https://www.hilti.com/> +1(800) 879-8000.
 - 4) ITW Ramset/Red Head; Illinois Tool Works, Inc. 155 Harlem Ave, Glenview, IL 60025. <https://www.itwredhead.com/> (800) 848-5611.
 - 5) MKT Fastening, LLC. 1 Gunnebo Dr, Lonoke, AR 72086. <https://www.mktfastening.com/> (501) 676-2222.

3. Concrete Inserts: Steel or malleable-iron, slotted support system units are similar to MSS Type 18 units and comply with MFMA-4 or MSS SP-58.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58 units are suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: Stainless-steel springhead type.
7. Hanger Rods: Threaded steel.

PART 3 - EXECUTION

E 260529.3.1 APPLICATION

- A. Comply with the following standards for application and installation requirements of hangers and supports, except where requirements on Drawings or in this Section are stricter:
 1. NECA 1.
 2. NECA 101
 3. NECA 105.
- B. Comply with requirements in Section 078413 "Penetration Firestopping" for firestopping materials and installation for penetrations through fire-rated walls, ceilings, and assemblies.
- C. Comply with requirements for raceways and boxes specified in Section 260533 "Raceways and Boxes for Electrical Systems."
- D. Support overhead electrical systems from building structural framing. Do NOT support electrical systems from other conduit, except as noted.
 1. If necessary, install appropriately sized steel support members spanning structural framing members to support electrical systems.
- E. Maximum Support Spacing and Minimum Hanger Rod Size for Raceways: Space supports for EMT, IMC, and RMC as required by NFPA 70. Minimum rod size must be 3/8 inch (6 mm) in diameter.
- F. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.
 1. Secure raceways and cables to these supports with single-bolt conduit clamps.
- G. Mounting straps for non-metallic conduit must allow movement during expansion and contraction, yet secure conduit to structure.

E 260529.3.2 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this article.
- B. Raceway Support Methods: Use methods described in NECA 1.
- C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination must be weight of supported components plus 200 lb/90 kg.
- D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
 1. To New Concrete: Bolt to concrete inserts.
 2. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
 3. To Existing Concrete: Expansion anchor fasteners.

- 4. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches (100 mm) thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches (100 mm) thick.
- 5. To Steel: Beam clamps (MSS SP-58, Type 19, 21, 23, 25, or 27), complying with MSS SP-69.
- 6. To Light Steel: Sheet metal screws.
- 7. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate by means that meet strength and anchorage requirements.
- E. Drill holes for expansion anchors in concrete at locations and to depths that avoid the need for reinforcing bars.

E 260529.3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

- A. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.
- B. Metal supports must be installed plumb and level.
- C. Metal supports must be painted, galvanized, or coated to prevent corrosion or made of suitable materials as to resist corrosion. Touch-up paint or coatings must be applied where materials were coated at factory and scored, cut, damaged, or similar in the field.
- D. Dissimilar metals must be painted, insulated, or otherwise physically separated to prevent corrosion.
- E. Field Welding: Comply with AWS D1.1/D1.1M.

E 260529.3.4 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
 - 1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils (0.05 mm).
- B. Touchup: Comply with manufacturer's requirements for exterior paint, interior paint, high performance coatings, and other finishes for cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal.
- C. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

PART 4 - BASIS OF PAYMENT

E 260529.4.1 MEASUREMENT

The EACH measurement of this pay item includes all materials, assembly, finishes, coatings, welding, nuts, bolts, washers, and other required hardware, for a complete and functional installation.

E 260529.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

- 1. Raceway supports and hangers including anchors, slotted channel, hardware welding, coatings and finishes, and other required materials and components

Payment will be made under:

Item No.	Description	Pay Unit
E 260529	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	EACH

END OF SECTION E 260529

SECTION E 260533 – RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS**PART 1 - GENERAL****E 260533.1.1 RELATED DOCUMENTS**

Drawings and general provisions of the Contract apply to this Section.

E 260533.1.2 SUMMARY

- A. Section Includes:
 1. Metal conduits and fittings.
 2. Nonmetallic conduits and fittings.
 3. Metal wireways and auxiliary gutters.
 4. Boxes, enclosures, and cabinets.
 5. Handholes and boxes for exterior underground cabling.
- B. For following systems:
 1. Electrical power wiring.
 2. Communications systems, including telephone and data.

C. Related Requirements:

E 260533.1.3 DEFINITIONS

- A. GRC: Galvanized rigid steel conduit.
- B. ARC: Aluminum rigid conduit.

E 260533.1.4 ACTION SUBMITTALS

Product Data: For surface raceways, wireways and fittings, floor boxes, tele-power poles, hinged-cover enclosures, and cabinets.

PART 2 - PRODUCTS**E 260533.2.1 METAL CONDUITS AND FITTINGS**

- A. Metal Conduit:
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. AFC Cable Systems; a part of Atkore International. 960 Flaherty Drive, New Bedford, MA 02745. <https://www.afcweb.com/> (800) 757-6996
 - b. Allied Tube & Conduit; a part of Atkore International. 16100 South Lathrop Avenue Harvey, IL 60426. <https://www.alliedeg.us/> (800) 882-5543
 - c. Anamet Electrical, Inc. 1000 Broadway Ave East, Mattoon, IL 61938. <https://www.anacondasealtite.com/> (800) 230-3718.
 - d. Calconduit. 19440 S. Dominguez Hills Dr., Rancho Dominguez, CA 90220. <http://www.calconduit.com/> (562) 803-4388.
 - e. Electri-Flex Company. 222 W Central Ave, Roselle, IL 60172. <https://www.electriflex.com/> (630) 529-2920.
 - f. FSR Inc. 244 Bergen Blvd, Woodland Park, NJ 07424. <https://fsrinc.com/> (973) 998-2300.
 - g. Korkap. 1100 US Hwy. 271 S., Gilmer, TX 75644. <https://www.ar-cat.com/arcatcos/cos49/arc49851.html> (903) 843-6562.
 - h. Opti-Com Manufacturing Network, Inc (OMNI). 259 Plauche St, New Orleans, LA 70123. <https://www.omni-opti.com/> (504) 736-0331.
 - i. O-Z/Gedney; a brand of Emerson Industrial Automation. 9377 W Higgins Rd, Rosemont, IL 60018. <https://www.appleton.emerson.com/en-us/o-z-gedney> (847) 268-6000.
 - j. Patriot Aluminum Products, LLC. 205 Ferncliff Dr, Louisa, VA 23093. <https://www.patriotsas.com/> (434) 510-1776.

- k. Perma-Cote. 1100 US Hwy 271 S, Gilmer, TX 75644. <https://perma-cote.com/> (903) 843-4388.
 - l. Picoma Industries, Inc. 9208 Jeffery Dr, Cambridge, OH 43725. <https://www.picoma.com/> (740) 432-2146.
 - m. Plasti-Bond. 1100 US HWY 271 S. Gilmer, TX 75644. <https://plasti-bond.com/> (903) 843-5591.
 - n. Republic Conduit. 633 Georgia Tubing Rd, Cedar Springs, GA 39832. (229) 372-4501.
 - o. Southwire Company. One Southwire Drive, Carrollton, GA 30119. <https://www.southwire.com/> (770) 832-4529.
 - p. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
 - q. Topaz Electric; a division of Topaz Lighting Corp. 3241 Route 112, Building 7, Medford, NY 11763. <https://www.topaz-usa.com/> 800-666-2852.
 - r. Western Tube and Conduit Corporation. 2001 E Dominguez St, Long Beach, CA 90810. <https://www.westerntube.com/> (310) 537-6300.
 - s. Wheatland Tube Company. 90 Hurlbut St, Westwood, NJ 07675. <https://www.wheatland.com/> (201) 568-1012.
2. Listing and Labeling: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 3. GRC: Comply with ANSI C80.1 and UL 6.
 4. Retain "ARC" Paragraph below for corrosion resistance and for power distribution at frequencies above 60 Hz or for other special conditions.
 5. IMC: IMC is not permitted for use on this project.
 6. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit.
 - a. Comply with NEMA RN 1.
 - b. Coating Thickness: 0.040 inch (1 mm), minimum.
 7. EMT: EMT is not permitted for use on this project.
 8. In "FMC" Paragraph below, zinc-coated steel is most common type and provides some additional protection from physical damage. Aluminum is much lighter and easier to install.
 9. FMC: FMC is not permitted for use on this project.
 10. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.
- B. Metal Fittings:
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. AFC Cable Systems; a part of Atkore International. 960 Flaherty Drive, New Bedford, MA 02745. <https://www.afcweb.com/> (800) 757-6996.
 - b. Allied Tube & Conduit; a part of Atkore International. 16100 South Lathrop Avenue Harvey, IL 60426. <https://www.alliedeg.us/> (800) 882-5543.
 - c. Anamet Electrical, Inc. 1000 Broadway Ave East, Mattoon, IL 61938. <https://www.anacondasealtite.com/> (800) 230-3718
 - d. Calconduit. 19440 S. Dominguez Hills Dr., Rancho Dominguez, CA 90220. <http://www.calconduit.com/> (562) 803-4388
 - e. Electri-Flex Company. 222 W Central Ave, Roselle, IL 60172. <https://www.electriflex.com/> (630) 529-2920
 - f. FSR Inc. 244 Bergen Blvd, Woodland Park, NJ 07424. <https://fsrinc.com/> (973) 998-2300.
 - g. Korkap. 1100 US Hwy. 271 S., Gilmer, TX 75644. <https://www.ar-cat.com/arcacos/cos49/arc49851.html> (903) 843-6562.

- h. Opti-Com Manufacturing Network, Inc (OMNI). 259 Plauche St, New Orleans, LA 70123. <https://www.omni-opti.com/> (504) 736-0331
 - i. O-Z/Gedney; a brand of Emerson Industrial Automation. 9377 W Higgins Rd, Rosemont, IL 60018. <https://www.appleton.emerson.com/en-us/o-z-gedney> (847) 268-6000.
 - j. Patriot Aluminum Products, LLC. Patriot Aluminum Products, LLC. 205 Ferncliff Dr, Louisa, VA 23093. <https://www.patriotsas.com/> (434) 510-1776.
 - k. Perma-Cote. 1100 US Hwy 271 S, Gilmer, TX 75644. <https://perma-cote.com/> (903) 843-4388.
 - l. Picoma Industries, Inc. 9208 Jeffery Dr, Cambridge, OH 43725. <https://www.picoma.com/> (740) 432-2146.
 - m. Plasti-Bond. 1100 US HWY 271 S. Gilmer, TX 75644. <https://plasti-bond.com/> (903) 843-5591.
 - n. Republic Conduit. 633 Georgia Tubing Rd, Cedar Springs, GA 39832. (229) 372-4501.
 - o. Southwire Company. One Southwire Drive, Carrollton, GA 30119. <https://www.southwire.com/> (770) 832-4529.
 - p. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
 - q. Topaz Electric; a division of Topaz Lighting Corp. 3241 Route 112, Building 7, Medford, NY 11763. <https://www.topaz-usa.com/> (800) 666-2852.
 - r. Western Tube and Conduit Corporation. 2001 E Dominguez St, Long Beach, CA 90810. <https://www.westerntube.com/> (310) 537-6300.
 - s. Wheatland Tube Company. 90 Hurlbut St, Westwood, NJ 07675. <https://www.wheatland.com/> (201) 568-1012.
2. Comply with NEMA FB 1 and UL 514B.
 3. Listing and Labeling: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 4. Fittings, General: Listed and labeled for type of conduit, location, and use.
 5. Coordinate "Conduit Fittings for Hazardous (Classified) Locations" Subparagraph below with Drawings.
 6. Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 1203 and NFPA 70.
 7. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions where installed, and including flexible external bonding jumper.
 8. Coating for Fittings for PVC-Coated Conduit: Minimum thickness of 0.040 inch (1 mm), with overlapping sleeves protecting threaded joints.
 9. Bushings: Impact resistant plastic, 105 deg C rated. Grounding type must be insulated steel with proper ground lug.
- C. Joint Compound for GRC or ARC: Approved, as defined in NFPA 70, by authorities having jurisdiction for use in conduit assemblies, and compounded for use to lubricate and protect threaded conduit joints from corrosion and to enhance their conductivity.
- E 260533.2.2 NONMETALLIC CONDUITS AND FITTINGS
- A. Nonmetallic Conduit:
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. AFC Cable Systems; a part of Atkore International. 960 Flaherty Drive, New Bedford, MA 02745. <https://www.afcweb.com/> (800) 757-6996

- b. Anamet Electrical, Inc. 1000 Broadway Ave East, Mattoon, IL 61938. <https://www.anacondasealtite.com/> (800) 230-3718
 - c. Arnco Corporation. 860 Garden Street, Elyria OH 44035. www.arnco-corp.com (440) 322-1000.
 - d. CANTEX INC. 301 Commerce St., Suite 2700, Fort Worth, TX 76102. <https://www.cantexinc.com/> (817) 215-7000
 - e. CertainTeed Corporation. <https://www.certainteed.com/> 610-893-6200.
 - f. Condux International, Inc. 145 Kingswood Dr, Mankato, MN 56001. <https://www.condux.com/> (507) 387-6576.
 - g. Electri-Flex Company. 222 W Central Ave, Roselle, IL 60172. <https://www.electriflex.com/> (630) 529-2920
 - h. FRE Composites. 75 Rue Wales, Saint-André-d'Argenteuil, Quebec J0V 1X0, Canada. <https://frecompositesinc.com/> +1(450) 537-3311.
 - i. Kraloy. 1055 Wilton Grove Road, London, ON, N6A 4K3. <https://kraloyfittings.com/> (519) 681-2140.
 - j. Lamson & Sessions. 25701 Science Park Dr, Cleveland, OH 44122. <http://www.lamson-sessions.com/> (800) 346-2646.
 - k. Niedax Inc. 2970 Charter St, Columbus, OH 43228. <https://www.niedax-usa.com/> (614) 921-8469.
 - l. RACO; Hubbell. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/>
 - m. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
 - n. Topaz Electric; a division of Topaz Lighting Corp. 3241 Route 112, Building 7, Medford, NY 11763. <https://www.topaz-usa.com/> (800) 666-2852.
- 2. Listing and Labeling: Nonmetallic conduit must be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - 3. Fiberglass: Fiberglass conduit is not permitted for use on this project.
 - 4. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise indicated.
 - a. Utilize PVC coated rigid steel conduit elbows for sizes 1-1/4 inch and larger, unless phase conductors are indicated to be installed in separate conduits.
 - 5. LFNC: LFNC is not permitted for use on this project.
 - 6. ENT: ENT is not permitted for use on this project.
- B. Nonmetallic Fittings:
- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. AFC Cable Systems; a part of Atkore International. 960 Flaherty Drive, New Bedford, MA 02745. <https://www.afcweb.com/> (800) 757-6996
 - b. Anamet Electrical, Inc. 1000 Broadway Ave East, Mattoon, IL 61938. <https://www.anacondasealtite.com/> (800) 230-3718
 - c. Arnco Corporation. 860 Garden Street, Elyria OH 44035. www.arnco-corp.com (440) 322-1000
 - d. CANTEX INC. 301 Commerce St., Suite 2700, Fort Worth, TX 76102. <https://www.cantexinc.com/> (817) 215-7000.
 - e. CertainTeed Corporation. <https://www.certainteed.com/> 610-893-6200.
 - f. Condux International, Inc. 145 Kingswood Dr, Mankato, MN 56001. <https://www.condux.com/> (507) 387-6576

- g. Electri-Flex Company. 222 W Central Ave, Roselle, IL 60172. <https://www.electriflex.com/> (630) 529-2920
 - h. FRE Composites. 75 Rue Wales, Saint-André-d'Argenteuil, Quebec J0V 1X0, Canada. <https://frecompositesinc.com/> +1(450) 537-3311.
 - i. Kraloy. 1055 Wilton Grove Road, London, ON, N6A 4K3. <https://kraloyfittings.com/> (519) 681-2140.
 - j. Lamson & Sessions. 25701 Science Park Dr, Cleveland, OH 44122. <http://www.lamson-sessions.com/> (800) 346-2646.
 - k. Niedax Inc. 2970 Charter St, Columbus, OH 43228. <https://www.niedax-usa.com/> (614) 921-8469.
 - l. RACO; Hubbell. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/>
 - m. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
 - n. Topaz Electric; a division of Topaz Lighting Corp. 3241 Route 112, Building 7, Medford, NY 11763. <https://www.topaz-usa.com/> (800) 666-2852.
- 2. Fittings, General: Listed and labeled for type of conduit, location, and use.
 - 3. Fittings for RNC: Comply with NEMA TC 3; match to conduit type and material.
 - 4. Solvents and Adhesives: As recommended by conduit manufacturer.
- E 260533.2.3 METAL WIREWAYS AND AUXILIARY GUTTERS
- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. B-line, an Eaton business. <https://www.eaton.com/us/en-us/products/support-systems/bl-transition.html> +1(800) 386-1911.
 - 2. Hoffman; a brand of Pentair Equipment Protection. <https://hoffman.nvent.com/en-us/>
 - 3. MonoSystems, Inc. 180 Hopkins St, Buffalo, NY 14220. <https://www.monosystems.com/> (888) 764-7681.
 - 4. Square D. <https://www.se.com/us/en/brands/squared/> (888) 778-2733.
 - B. Description: Sheet metal, complying with UL 870 and NEMA 250, Type 1 Type 3R unless otherwise indicated, and sized according to NFPA 70.
 - 1. Metal wireways installed outdoors must be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - C. Fittings and Accessories: Include covers, couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.
 - D. Wireway Covers: Hinged type unless otherwise indicated.
 - E. Finish: Manufacturer's standard enamel finish.
- E 260533.2.4 NONMETALLIC WIREWAYS AND AUXILIARY GUTTERS
- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Allied Moulded Products, Inc. 222 N Union St, Bryan, OH 43506. <https://www.alliedmoulded.com/> (419) 636-4217.
 - 2. Hoffman; a brand of Pentair Equipment Protection. <https://hoffman.nvent.com/en-us/>
 - 3. Lamson & Sessions. 25701 Science Park Dr, Cleveland, OH 44122. <http://www.lamson-sessions.com/> (800) 346-2646.
 - 4. Niedax Inc. 2970 Charter St, Columbus, OH 43228. <https://www.niedaxusa.com/> (614) 921-8469.

- B. Listing and Labeling: Nonmetallic wireways and auxiliary gutters must be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - C. Description: Fiberglass polyester, extruded and fabricated to required size and shape, without holes or knockouts. Cover must be gasketed with oil-resistant gasket material and fastened with captive screws treated for corrosion resistance. Connections must be flanged and have stainless-steel screws and oil-resistant gaskets.
 - D. Description: PVC, extruded and fabricated to required size and shape, and having snap-on cover, mechanically coupled connections, and plastic fasteners.
 - E. Fittings and Accessories: Couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings must match and mate with wireways as required for complete system.
 - F. Solvents and Adhesives: As recommended by conduit manufacturer.
- E 260533.2.5 SURFACE RACEWAYS AND TELE-POWER POLES
- A. Listing and Labeling: Surface raceways and tele-power poles must be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - B. Surface Metal Raceways: Galvanized steel with snap-on covers complying with UL 5. Manufacturer's standard enamel finish in color selected by Architect.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hubbell Incorporated; Wiring Device-Kellems. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/>
 - b. MonoSystems, Inc. 180 Hopkins St, Buffalo, NY 14220. <https://www.monosystems.com/> (888) 764-7681.
 - c. Panduit Corp. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487. <https://www.panduit.com/> (800) 777-3300.
 - d. Thomas & Betts. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
 - e. Wiremold / Legrand. 60 Woodlawn St, West Hartford, CT 06110. <https://www.legrand.us/wiremold> (860) 233-6251.
- E 260533.2.6 BOXES, ENCLOSURES, AND CABINETS
- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Adalet. 28800 Clemens Road, Westlake, OH 44145-1134, <https://scottfetzer.com/scott-fetzer-companies/adalet/> (440) 892-3000.
 2. Cutler-Hammer; Eaton Corporation. <https://www.eaton.com/us/en-us/company/about-us/our-heritage/cutler-hammer.html> +1(800) 498-2678.
 3. Crouse-Hinds, an Eaton business. <https://www.eaton.com/us/en-us/company/about-us/our-heritage/crouse-hinds-series.html> +1(800) 498-2678.
 4. EGS/Appleton Electric. <https://www.appleton.emerson.com/en-us>
 5. Erickson Electrical Equipment Company. 475 Bonnie Ln, Elk Grove Village, IL 60007. <https://products.ericksonelectric.com/> (847) 640-7701.
 6. FSR Inc. 244 Bergen Blvd, Woodland Park, NJ 07424. <https://fsrinc.com/> (973) 998-2300.
 7. ABB; Electrical Distribution & Control Division. <https://new.abb.com/> 1 800 435 7365.
 8. Hoffman; a brand of Pentair Equipment Protection. <https://hoffman.nvent.com/en-us/>

9. Hubbell Incorporated; Wiring Device-Kellems. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/>
 10. Kraloy. 1055 Wilton Grove Road, London, ON, N6A 4K3. <https://kraloyfittings.com/> (519) 681-2140.
 11. Milbank Manufacturing Co. 4801 Deramus Kansas City, MO 64120. <https://www.milbankworks.com/> (877) 483-5314.
 12. MonoSystems, Inc. 180 Hopkins St, Buffalo, NY 14220. <https://www.monosystems.com/> (888) 764-7681. Oldcastle Infrastructure. 3900 Glover Rd, Easton, PA 18040. <https://oldcastleinfrastructure.com/> (888) 965-3227.
 13. O-Z/Gedney; a brand of Emerson Industrial Automation. 9377 W Higgins Rd, Rosemont, IL 60018. <https://www.appleton.emerson.com/en-us/o-z-gedney> (847) 268-6000.
 14. Plasti-Bond. 1100 US HWY 271 S. Gilmer, TX 75644. <https://plastibond.com/> (903) 843-5591.
 15. RACO; Hubbell. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/>
 16. Kraloy. 1055 Wilton Grove Road, London, ON, N6A 4K3. <https://kraloyfittings.com/> (519) 681-2140.
 17. Siemens Energy & Automation, Inc. 300 New Jersey Avenue Suite 1000, Washington D.C. 20001. <https://www.siemens.com/> +1(800) 743-6367.
 18. Spring City Electrical Manufacturing Company. 1 S Main St, Spring City, PA 19475. <https://www.springcity.com/> (610) 948-4000.
 19. Square D; Group Schneider. <https://www.se.com/us/en/brands/squared/> (888) 778-2733.
 20. Stahlin Non-Metallic Enclosures. 500 Maple Street, Belding, MI 48809. <https://stahlin.com/> (616)-794-0700.
 21. Thomas & Betts Corporation; A Member of the ABB Group. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
 22. Topaz Electric; a division of Topaz Lighting Corp. 3241 Route 112, Building 7, Medford, NY 11763. <https://www.topaz-usa.com/> (800) 666-2852.
 23. Wiremold / Legrand. 60 Woodlawn St, West Hartford, CT 06110. <https://www.legrand.us/wiremold> (860) 233-6251.
- B. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations must be listed for use in wet locations.
 - C. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.
 - D. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, ferrous alloy aluminum, Type FD, with gasketed cover.
 - E. Nonmetallic Outlet and Device Boxes: Comply with NEMA OS 2 and UL 514C.
 - F. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, cast aluminum galvanized, cast iron with gasketed cover.
 - G. Device Box Dimensions: 4 inches square by 2-1/8 inches deep (100 mm square by 60 mm deep).
 - H. Gangable boxes are prohibited.
 - I. Hinged-Cover Enclosures: Comply with UL 50 and NEMA 250, Type 3R minimum with continuous-hinge cover with flush latch unless otherwise indicated.
 1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
 2. Nonmetallic Enclosures: Plastic Fiberglass.
 3. Interior Panels: Steel; all sides finished with manufacturer's standard enamel.
 - J. Cabinets:

1. NEMA 250, Type 3R, unless otherwise indicated, galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel, sized as indicated on Drawings.
 2. Hinged door in front cover with flush latch and concealed hinge and screws. Size door to allow access to terminals without removing cover.
 3. Key latch to match panelboards.
 4. Metal barriers to separate wiring of different systems and voltage.
 5. Terminal Strips
 - a. Below 50 volts: Screw terminal type.
 - b. 51 to 250 volts: 250 volt screw terminal type with barrier between each set of terminals and individual terminal points for each conductor.
 - c. 251 to 600 volts: 600 volt terminal strips similar to (b) above.
 6. Accessory feet where required for freestanding equipment.
 7. Identification
 - a. Identify terminal strips with permanent numbers.
 8. Wiring Diagrams
 - a. Provide wiring diagram on inside of each cabinet door showing units and conductors connected to cabinet.
- E 260533.2.7 HANDHOLES FOR EXTERIOR UNDERGROUND WIRING
- A. General Requirements for Handholes:
 1. Handholes for use in underground systems must be designed and identified as defined in NFPA 70, for intended location and application.
 2. Boxes installed in wet areas must be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - B. Polymer-Concrete Handholes with Polymer-Concrete Cover: Molded of sand and aggregate, bound together with polymer resin, and reinforced with steel, fiberglass, or a combination of the two.
 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Quazite: Hubbell Power Systems, Inc. 210 N. Allen Centralia, MO 65240 USA. <https://www.hubbell.com/hubbellpowersystems/> (573) 682-5521.
 - b. Kwikbond Polymers. 923 Teal Dr, Benicia, CA 94510. <https://www.kwikbondpolymers.com/> (866) 434-1772.
 - c. Jensen Precast. 9895 Double R Blvd, Reno, NV 89521. <https://www.jensenprecast.com/> (775) 352-2700.
 2. Standard: Comply with SCTE 77.
 3. Size: As indicated on Drawings
 4. Load Rating: UL listed and labeled for Tier 5 loading, with 5,200 lb. design load and 11, 284 lb. minimum test load
 5. Color of Frame and Cover: Gray.
 6. First option in "Configuration" Subparagraph below facilitates bottom conduit entry. Second option may be provided by a separate slab placed in the excavation under an open-bottom enclosure; third option is obtained by molding or fabricating the bottom integrally with the body of unit.
 7. Configuration: Designed for flush burial with two (2) stackable sections and open bottom unless otherwise indicated.
 8. Cover: Weatherproof, gasketed, secured by stainless-steel, tamper-resistant locking devices and having structural load rating consistent with enclosure and handhole location.
 9. Cover Finish: Nonskid finish must have a minimum coefficient of friction of 0.50.

10. Cover Legend: Molded lettering, "ELECTRIC.", "COMMUNICATIONS", or other lettering as required by type of cables being installed.
11. Retain "Conduit Entrance Provisions" Subparagraph below if conduit enters enclosure through the side. Otherwise, entry is made through an open bottom or through side openings cut in the field, as specified in "Installation of Underground Handholes and Boxes" Article. Coordinate with Drawings.
12. Conduit Entrance Provisions: Conduit-terminating fittings must mate with entering ducts for secure, fixed installation in enclosure wall.
13. Handholes 12 Inches Wide by 24 Inches Long (300 mm Wide by 600 mm Long) Insert dimensions and Larger: Have inserts for cable racks and pulling-in irons installed before concrete is poured.

E 260533.2.8 UNDERGROUND DUCT BANKS

General requirements for concrete

1. Install top of duct bank minimum 18 inches below finished grade with plastic warning tape 12 inches below finished grade.
2. Install conduit with minimum grade of 4 inches per 100 feet.
3. Terminate conduit in end bell at manhole entries.
4. Stagger conduit joints in concrete encasement 6 inches minimum.
5. Provide minimum 3-inch concrete cover at bottom, top, and sides of duct bank. Use suitable separators and chairs installed not greater than four feet on centers to provide conduit spacing as indicated. Securely anchor conduit to prevent movement during concrete placement.
6. Construct duct banks with 3,000 psi concrete. Provide six No. 4 steel reinforcing bars approximately equally distributed around the duct bank along the lengthwise dimension and one No. 4 steel reinforcing bar every 12 inches on center around the perimeter of the cross-section. Steel reinforcing bars must be embedded approximately 3-inches inside the concrete encasement.

PART 3 - EXECUTION

E 260533.3.1 RACEWAY APPLICATION

- A. Outdoors: Apply raceway products as specified below unless otherwise indicated:
 1. Exposed Conduit, Not Subject to Physical Damage: ARC, GRC, PVC COATED GRC.
 2. Exposed Conduit, Subject to Physical Damage: ARC, GRC, PVC COATED GRC
 3. Concealed Conduit, Aboveground: ARC, GRC, PVC COATED GRC
 4. Covered Locations, Open to Exterior: ARC, GRC, PVC COATED GRC.
 5. Underground Conduit: Type EPC-40-PVC, direct buried.
 6. Retain first option in first subparagraph below if raceway may be exposed to physical damage.
 7. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
 8. Exposed Boxes and Enclosures, Aboveground: NEMA 250, Type 4. Rigid PVC construction with suitable covers, UL rated for 90 degree conductors.
 9. Boxes Flush Mounted in Building Walls, Exterior Side: Weatherproof cast aluminum outlet box, gasketed extension as required, plugs for all unused openings, ground screw mounting lugs, polycarbonate weatherproof-while-in-use cover, grey finish.
 10. Terminate PVC conduit prior to entering building in suitable PVC-to-rigid steel conduit adaptor fitting.
 11. Handholes for Underground Wiring:

- a. Handholes in Driveway, Parking Lot, and Off-Roadway Locations, Subject to Occasional, Nondeliberate Loading by Heavy Vehicles: Polymer concrete Fiberglass enclosures with polymer-concrete frame and cover, SCTE 77, Tier 15 structural load rating.
 - b. Handholes in Sidewalk and Similar Applications with a Safety Factor for Nondeliberate Loading by Vehicles: Polymer-concrete units Heavy-duty fiberglass units with polymer-concrete frame and cover, SCTE 77, Tier 8 structural load rating.
 - c. Handholes and Pull Boxes Subject to Light-Duty Pedestrian Traffic Only: Fiberglass-reinforced polyester resin, structurally tested according to SCTE 77, (13 345-N) Tier 5 structural load rating.
- B. Minimum Raceway Size: 3/4-inch (21-mm) trade size.
 - C. Raceway Fittings: Compatible with raceways and suitable for use and location.
 - 1. Rigid Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
 - 2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with this type of conduit. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer and apply in thickness and number of coats recommended by manufacturer.
 - 3. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.
 - D. Do not install aluminum conduits, boxes, or fittings in contact with concrete or earth.
 - E. Install surface raceways only where indicated on Drawings.
 - F. Do not install nonmetallic conduit where ambient temperature exceeds 120 deg F (49 deg C).
- E 260533.3.2 INSTALLATION OF RACEWAYS
- A. Comply with requirements in Section 260529 "Hangers and Supports for Electrical Systems" for hangers and supports. Mount exposed conduits tight to walls Provide offsets at boxes and equipment.
 - B. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NECA 102 for aluminum conduits. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.
 - C. Coordinate installation of raceways in masonry and concrete with construction process.
 - D. Route conduit to avoid structural obstructions, minimizing crossovers.
 - E. 150 mm Install conduit free from dents and bruises. Plug ends to prevent entry or dirt or moisture.
 - F. Complete raceway installation and clean out raceway before starting conductor installation.
 - G. Arrange stub-ups so curved portions of bends are not visible above finished slab.
 - H. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches (300 mm) of changes in direction.
 - I. Make bends in raceway using large-radius preformed ells. Field bending must be according to NFPA 70 minimum radii requirements. Use only equipment specifically designed for material and size involved.
 - J. Support conduit within 12 inches (300 mm) of enclosures to which attached.
 - K. Do NOT install conduit horizontally in slabs except where indicated on Drawings.

- L. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- M. Install bushings on all conduit terminations, except where insulated throat connectors are used. Use insulated steel type bushings where grounding or bonding is required. Use plastic type bushings at other locations.
- N. To avoid conductor derating and mutual heating, do NOT group conduits in earth. Separate conduits immediately after leaving equipment.
- O. Coat field-cut threads on PVC-coated raceway with a corrosion-preventing conductive compound prior to assembly.
- P. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch (35mm) trade size and insulated throat metal bushings on 1-1/2-inch (41-mm) trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.
- Q. Install raceways square to the enclosure and terminate at enclosures with locknuts. Install locknuts hand tight plus 1/4 turn more.
- R. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.
- S. Cut conduit perpendicular to the length. For conduits 2-inch (53-mm) trade size and larger, use roll cutter or a guide to make cut straight and perpendicular to the length.
- T. Install pull wires in all empty and/or spare raceways. Use polypropylene or monofilament plastic line with not less than 200-lb (90-kg) tensile strength. Leave at least 12 inches (300 mm) of slack at each end of pull wire. Cap all empty and/or spare raceways and install identification tags. Cap underground raceways designated as spare above grade alongside raceways in use.
- U. Expansion-Joint Fittings:
 - 1. Install in each run of aboveground RNC that is located where environmental temperature change may exceed 30 deg F (17 deg C) and that has straight-run length that exceeds 25 feet (7.6 m). Install in each run of aboveground RMC conduit that is located where environmental temperature change may exceed 100 deg F (55 deg C) and that has straight-run length that exceeds 100 feet (30 m).
 - 2. Install type and quantity of fittings that accommodate temperature change listed for each of the following locations:
 - a. Outdoor Locations Not Exposed to Direct Sunlight: 125 deg F (70 deg C) temperature change.
 - b. Outdoor Locations Exposed to Direct Sunlight: 155 deg F (86 deg C) temperature change.
 - 3. Install fitting(s) that provide expansion and contraction for at least 0.00041 inch per foot of length of straight run per deg F (0.06 mm per meter of length of straight run per deg C) of temperature change for PVC conduits. Install fitting(s) that provide expansion and contraction for at least 0.000078 inch per foot of length of straight run per deg F (0.0115 mm per meter of length of straight run per deg C) of temperature change for metal conduits.
 - 4. Install expansion fittings at all locations where conduits cross building or structure expansion joints.

5. Install each expansion-joint fitting with position, mounting, and piston setting selected according to manufacturer's written instructions for conditions at specific location at time of installation. Install conduit supports to allow for expansion movement.
- V. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 72 inches (1830 mm) of flexible conduit for recessed and semi-recessed luminaires, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.
 1. Use LFMC in damp or wet locations subject to severe physical damage.
 2. Use LFMC in damp or wet locations not subject to severe physical damage.
 - W. Seal around all conduits through walls and floors to maintain fire and smoke rating and prevent sound transmission.
- E 260533.3.3 INSTALLATION OF BOXES AND CABINETS
- A. Size pull boxes and junction boxes to provide ample room for conductors, cable bends, and terminations where applicable. Utilize NEC as minimum sizing guide only.
 - B. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to bottom of box unless otherwise indicated.
 - C. Coordinate locations and mounting heights of outlets mounted above counters with built-in units, window sills, heating/cooling equipment, etc., prior to installation. Adjust outlet mounting height to agree with required location for equipment served.
 - D. Recessed Boxes in Masonry Walls: Coordinate cutting of masonry walls to achieve neat openings for boxes. Adjust position of outlets in finished masonry walls to suit masonry course lines. Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall. Prepare block surfaces to provide a flat surface for a raintight connection between box and cover plate or supported equipment and box.
 - E. Identify all conductors within pull boxes and junction boxes per Section 260553 - "Identification for Electrical Systems".
 - F. Securely anchor all fittings and boxes.
 - G. Mount cabinets on, or in, wall with top of box no higher than 72 inches above floor.
 - H. Terminate conduit in cabinets with lock nut and bushing or lock nut and grounding bushing.
 - I. Terminate wiring in cabinets on terminal blocks or strips.
 - J. Vacuum clean cabinets on completion of installation.
- E 260533.3.4 INSTALLATION OF UNDERGROUND CONDUIT
- Direct-Buried Conduit:
1. Excavate trench bottom to provide firm and uniform support for conduit.
 2. Install backfill.
 3. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches (300 mm) of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction.
 4. Install manufactured duct elbows for stub-ups at poles and equipment and at building entrances through floor unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
 5. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment.

- a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches (75 mm) of concrete for a minimum of 12 inches (300 mm) on each side of the coupling.
 - b. For stub-ups at equipment mounted on outdoor concrete bases and where conduits penetrate building foundations, extend steel conduit horizontally a minimum of 60 inches (1500 mm) from edge of foundation or equipment base. Install insulated grounding bushings on terminations at equipment.
6. Underground Warning Tape: Comply with requirements in Section 260553 "Identification for Electrical Systems."

E 260533.3.5 INSTALLATION OF UNDERGROUND HANDHOLES

- A. Excavate sufficient material to provide sufficient space for installation of handhole and to perform work in satisfactory manner.
- B. Install handholes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.
- C. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch (12.5-mm) sieve to No. 4 (4.75-mm) sieve and compacted to same density as adjacent undisturbed earth.
- D. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch (25 mm) above finished grade.
- E. Install handholes with bottom below frost line.
- F. Install removable hardware, including pulling eyes, cable stanchions, cable arms, and insulators, as required for installation and support of cables and conductors and as indicated. Select arm lengths to be long enough to provide spare space for future cables but short enough to preserve adequate working clearances in enclosure.
- G. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.
- H. Ground handhole per Section 260526 - "Grounding and Bonding for Electrical Systems."
- I. Plug all openings to prevent infiltration or leakage.
- J. Provide two (2) entry tools for tamper resistant hardware.

E 260533.3.6 PROTECTION

Protect coatings, finishes, and cabinets from damage and deterioration.

- 1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
- 2. Repair damage to PVC coatings or paint finishes with matching touchup coating recommended by manufacturer.

PART 4 - BASIS OF PAYMENT

E 260533.4.1. MEASUREMENT

The unit measurement of the below pay items will be LINEAR-FOOT and includes all materials components, fittings, coatings, clamps, adhesives, and other required appurtenances to form a complete and functional raceway system, and box or enclosure installation.

E 260533.4.2. PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The price for hangers and supports will be paid under Section 260529 – "Hangers and Supports for Electrical Systems." The price bid will include, but not be limited to, the following:

- 1. 1" galvanized metallic raceway including all fittings, coating touch-up, clamps, and other required materials and components
- 2. 2" galvanized metallic raceway including all fittings, coating touch-up, clamps, and other required materials and components.

3. 1 ½" nonmetallic raceway including fittings, clamps, and other required materials and components
4. 2" nonmetallic raceway including fittings, clamps, and other required materials and components
5. Pullboxes for electrical systems
6. Enclosures

Payment will be made under:

Item No.	Description	Pay Unit
E 260533 A1.0	METAL CONDUIT AND TUBING (1" GALVANIZED RIGID STEEL CONDUIT)	LINEAR-FOOT
E 260533 AC2.0	METAL CONDUIT AND TUBING (2" GALVANIZED RIGID STEEL CONDUIT)	LINEAR-FOOT
E 260533 AC2.5	METAL CONDUIT AND TUBING (2-1/2" GALVANIZED RIGID STEEL CONDUIT)	LINEAR-FOOT
E 260533 D	BOXES FOR ELECTRICAL SYSTEMS	EACH
E 260533 EN	ENCLOSURE, 72"x72"x12"	EACH
E 260533 P1.5	RIGID NON-METALLIC CONDUIT (1 1/2" PVC SCHEDULE 40 CONDUIT)	LINEAR-FOOT
E 260533 P2.0	RIGID NON-METALLIC CONDUIT (2" PVC SCHEDULE 40 CONDUIT)	LINEAR-FOOT

END OF SECTION E 260533

SECTION E 260543 - UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL AND COMMUNICATION SYSTEMS

PART 1 - GENERAL

E 260543.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

E 260543.1.2 SUMMARY

This Section includes the following:

1. Conduit, ducts, and duct accessories for concrete-encased duct banks
2. Manholes.

E 260543.1.3 DEFINITION

RNC: Rigid nonmetallic conduit.

E 260543.1.4 SUBMITTALS

A. Product Data: For the following:

1. Ductbank materials, including separators and miscellaneous components.
2. Ducts and conduits and their accessories, including elbows, end bells, bends, fittings, and solvent cement.
3. Accessories for manholes.
4. Warning tape.
5. Nylon Pull Rope
6. Cable support Insulators

B. Shop Drawings for Precast or Factory-Fabricated Underground Utility Structures such as Manholes: Include plans, elevations, sections, details, attachments to other work, and accessories, including the following:

1. Duct entry provisions, including locations and duct sizes.
2. Reinforcement details.
3. Frame and cover design and manhole frame support rings.
4. Step details.
5. Grounding details.
6. Dimensioned locations of cable rack inserts, pulling-in and lifting irons, and sumps.
7. Joint details.

C. Duct-Bank Coordination Drawings: Show duct profiles and coordination with other utilities and underground structures.

1. Include plans and sections, drawn to scale, and show bends and locations of expansion fittings.
2. Indicate distance from adjacent underground fire, water, sewage/ drainage lines
3. Drawings shall be signed and sealed by a qualified professional engineer.

D. Product Certificates For concrete and steel used in precast concrete manholes, as required by ASTM C 858.

E. Qualification Data: For professional engineer and testing agency.

F. Source quality-control test reports.

G. Field quality-control test reports.

E 260543.1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.
- B. Comply with ANSI C2.
- C. Comply with NFPA 70.

E 260543.1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver ducts to Project site with ends capped. Store nonmetallic ducts with supports to prevent bending, warping, and deforming.
- B. Store precast concrete and other factory-fabricated underground utility structures at Project site as recommended by manufacturer to prevent physical damage. Arrange so identification markings are visible.
- C. Lift and support precast concrete units only at designated lifting or supporting points.

E 260543.1.7 PROJECT CONDITIONS

Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service according to requirements indicated:

1. Notify Construction Manager no fewer than two weeks in advance of proposed interruption of electrical service.
2. Do not proceed with interruption of electrical service without Construction Manager's written permission.

E 260543.1.8 COORDINATION

- A. Coordinate layout and installation of ducts, manholes with final arrangement of other utilities, site grading, and surface features as determined in the field.
- B. Coordinate elevations of ducts and duct-bank entrances into manholes with final locations and profiles of ducts and duct banks as determined by coordination with other utilities, underground obstructions, and surface features. Revise locations and elevations from those indicated as required to suit field conditions and to ensure that duct runs drain to manholes, and as approved by Engineer.

E 260543.1.9 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
- B. Furnish cable-support stanchions, arms, insulators, and associated fasteners in quantities equal to 5 percent of quantity of each item installed.

PART 2 - PRODUCTS

E 260543.2.1 CONDUIT

RNC: NEMA TC 2, Type EPC-80-PVC, UL 651, with matching fittings by same manufacturer as the conduit, complying with NEMA TC 3 and UL 514B.

E 260543.2.2 NONMETALLIC DUCTS AND DUCT ACCESSORIES

- A. Basis-of-Design Product: Subject to compliance with requirements, provide a comparable product by one of the following:
 1. Cantex, Inc. 301 Commerce St., Suite 2700, Fort Worth, TX 76102. <https://www.cantexinc.com/> (817) 215-7000.
 2. Condux International, Inc. 145 Kingswood Dr, Mankato, MN 56001. <https://www.condux.com/> (507) 387-6576.
 3. Electri-Flex Company. 222 W Central Ave, Roselle, IL 60172. <https://www.electriflex.com/> (630) 529-2920
 4. IPEX Inc. <https://www.ipexna.com/usa> +1(800) 463-9572.
 5. Lamson & Sessions; Carlon Electrical Products. 25701 Science Park Dr, Cleveland, OH 44122. <http://www.lamson-sessions.com/> (800) 346-2646.
 6. Manhattan/CDT; a division of Cable Design Technologies. 1901 North Roselle Road, Schaumburg, IL 60195.
 7. Spiraduct/AFC Cable Systems, Inc. 960 Flaherty Drive, New Bedford, MA 02745. <https://www.afcweb.com/> (800) 757-6996
- B. Duct Accessories:

1. Duct Separators: Factory-fabricated rigid PVC interlocking spacers, sized for type and sizes of ducts with which used, and selected to provide minimum duct spacing indicated while supporting ducts during concreting or backfilling.
2. Warning Tape: Underground-line warning tape as specified in Specification Section "Identification for Electrical Systems."
3. Nylon Pull Rope

E 260543.2.3 PRECAST MANHOLES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following and as indicated on contract drawings:
 1. Oldcastle Infrastructure. 3900 Glover Rd, Easton, PA 18040. <https://oldcastleinfrastructure.com/> (888) 965-3227.
 2. Elmhurst-Chicago Stone Co. 400 W 1st St, Elmhurst, IL 60126. <https://www.ecstone.com/> (630) 832-4000.
 3. Cretex Companies, Inc. Waukesha, WI. <https://cretexseals.com/> 800-345-3764.
 4. Utility Concrete Products, LLC. 2495 Bungalow Rd, Morris, IL 60450. <https://utilityconcrete.com/> (815) 416-1000.
 5. Wausau Tile, Inc. 9001 US-51 BUS, Rothschild, WI 54474. <https://wausautile.com/> (715) 359-3121.
- B. Comply with ASTM C 858 with structural design loading as specified in Part 3 "Underground Enclosure Application" Article and with interlocking mating sections, complete with accessories, hardware, and features.
 1. Windows: Precast openings in walls, arranged to match dimensions and elevations of approaching ducts and duct banks plus an additional 12 inches vertically and horizontally to accommodate alignment variations.
 - a. Windows shall be located no less than 6 inches from interior surfaces of walls, floors, or roofs of manholes, but close enough to corners to facilitate racking of cables on walls.
 - b. Window opening shall have cast-in-place, welded wire fabric reinforcement for field cutting and bending to tie into concrete envelopes of duct banks.
 - c. Window openings shall be framed with at least two additional No. 4 steel reinforcing bars in concrete around each opening.
 2. Duct Entrances in Manhole Walls: Cast end-bell or duct-terminating fitting in wall for each entering duct.
 - a. Type and size shall match fittings to duct or conduit to be terminated.
 - b. Fittings shall align with elevations of approaching ducts and be located near interior corners of manholes to facilitate racking of cable.
- C. Concrete Knockout Panels: 1-1/2 to 2 inches thick, for future conduit entrance and sleeve for ground rod.
- D. Joint Sealant: Asphaltic-butyl material with adhesion, cohesion, flexibility, and durability properties necessary to withstand maximum hydrostatic pressures at the installation location with the ground-water level at grade.

E 260543.2.4 UTILITY STRUCTURE ACCESSORIES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following and as indicated on contract drawings:
 1. Bilco Company (The). 370 James St, New Haven, CT 06513. <https://www.bilco.com/> (203) 934-6363.
 2. Campbell Foundry Company. 800 Bergen St, Harrison, NJ 07029. <http://www.campbellfoundry.com/> (973) 483-5480.
 3. East Jordan Iron Works, Inc. 132 County Route 59, Phoenix, NY 13135. <https://www.ejco.com/am/en/> 315-699-2601.

4. Elmhurst-Chicago Stone Co. 400 W 1st St, Elmhurst, IL 60126. <https://www.ecstone.com/> (630) 832-4000.
 5. McKinley Iron Works, Inc. 4720 Esco Dr, Fort Worth, TX 76140. (800) 433-2303.
 6. Neenah Foundry Company. 31 Railroad Ave, Albany, NY 12205. <https://groupnei.com/> (518) 458-2278
 7. NewBasis. 2626 Kansas Ave, Riverside, CA 92507. <http://www.newbasis.com/> (951) 787-0600.
 8. Oldcastle Infrastructure. 3900 Glover Rd, Easton, PA 18040. <https://oldcastleinfrastructure.com/> (888) 965-3227.
 9. Osburn Associates, Inc. 11931 OH-93, Logan, OH 43138. <https://www.osburns.com/> (740) 385-6869.
 10. Pennsylvania Insert Corporation. 400 1st Ave, Royersford, PA 19468. <https://pennsylvaniainsert.com/> (800) 220-4857.
 11. Cretex Companies, Inc. Waukesha, WI. <https://cretexseals.com/> (800) 345-3764.
 12. Strongwell Corporation; Lenoir City Division. 400 Commonwealth Ave, Bristol, VA 24201. <https://www.strongwell.com/> (276) 645-8000.
 13. Underground Devices, Inc. 420 Academy Dr, Northbrook, IL 60062. <https://udevices.com/> (847) 205-9000.
 14. Utility Concrete Products, LLC. 2495 Bungalow Rd, Morris, IL 60450. <https://utilityconcrete.com/> (815) 416-1000.
 15. Wausau Tile, Inc. 9001 US-51 BUS, Rothschild, WI 54474. <https://wausautile.com/> (715) 359-3121.
- B. Manhole Frames, Covers, and Chimney Components: Comply with structural design loading specified for manhole.
1. Frame and Cover: Weatherproof, gray cast iron complying with ASTM A 48/A 48M, Class 30B with milled cover-to-frame bearing surfaces; diameter, as required.
 - a. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
 - b. Special Covers: Recess in face of cover designed to accept finish material in paved areas.
 2. Cover Legend: Cast in. Selected to suit system.
 - a. Legend: "ELECTRIC-HV"; "ELECTRIC-MV" and "ELECTRIC-27000V" for duct systems with medium-voltage cables.
 - b. Legend: "TELEPHONE" for communications, data, and telephone duct systems.
 3. Manhole Chimney Components: Precast concrete rings with dimensions matched to those of roof opening.
 - a. Mortar for Chimney Ring and Frame and Cover Joints: Comply with ASTM C 270, Type M, except for quantities less than 2.0 cu. ft. where packaged mix complying with ASTM C 387, Type M, may be used.
- C. Manhole Sump Frame and Grate: ASTM A 48/A 48M, Class 30B, gray cast iron.
- D. Pulling Eyes in Concrete Walls: Eyebolt with reinforcing-bar fastening insert, 2-inch-diameter eye, and 1-by-4-inch bolt.
1. Working Load Embedded in 6-Inch, 4000-psi Concrete: 13,000-lbf minimum tension.
- E. Pulling-In and Lifting Irons in Concrete Floors: 7/8-inch- diameter, hot-dip galvanized, bent steel rod; stress relieved after forming; and fastened to reinforcing rod. Exposed triangular opening.
1. Ultimate Yield Strength: 40,000-lbf shear and 60,000-lbf tension.

- F. Bolting Inserts for Concrete Utility Structure Cable Racks and Other Attachments: Flared, threaded inserts of noncorrosive, chemical-resistant, nonconductive thermoplastic material; 1/2-inch ID by 2-3/4 inches deep, flared to 1-1/4 inches minimum at base.
 - 1. Tested Ultimate Pullout Strength: 12,000 lbf minimum.
- G. Expansion Anchors for Installation after Concrete Is Cast: Zinc-plated, carbon-steel-wedge type with stainless-steel expander clip with 1/2-inch bolt, 5300-lbf rated pullout strength, and minimum 6800-lbf rated shear strength.
- H. Cable Rack Assembly: Steel, hot-dip galvanized, except insulators.
 - 1. Stanchions: T-section or channel; 2-1/4-inch nominal size; punched with 14 holes on 1-1/2-inch centers for cable-arm attachment.
 - 2. Arms: 1-1/2 inches wide, lengths ranging from 3 inches with 450-lb minimum capacity to 18 inches with 250-lb minimum capacity. Arms shall have slots along full length for cable ties and be arranged for secure mounting in horizontal position at any vertical location on stanchions.
 - 3. Insulators: High-glaze, wet-process porcelain arranged for mounting on cable arms.
- I. Duct-Sealing Compound: Nonhardening, safe for contact with human skin, not deleterious to cable insulation, and workable at temperatures as low as 35 deg F. Capable of withstanding temperature of 300 deg F without slump and adhering to clean surfaces of plastic ducts, metallic conduits, conduit coatings, concrete, masonry, lead, cable sheaths, cable jackets, insulation materials, and common metals.
- J. Portable Manhole Ladders: UL-listed, heavy-duty fiberglass specifically designed for portable use for access to electrical manholes. Minimum length equal to distance from deepest manhole floor to grade plus 36 inches. Provide one each per manhole.
- K. Cover Hooks: Heavy duty, designed for lifts 60 lbf and greater. Two required.

E 260543.2.5 SOURCE QUALITY CONTROL

Test and inspect precast concrete utility structures according to ASTM C 1037.

PART 3 - EXECUTION

E 260543.3.1 UNDERGROUND DUCT APPLICATION

- A. Ducts for Electrical Cables over 600 V: RNC, NEMA Type EPC-80 PVC, in concrete-encased duct bank, unless otherwise indicated.
- B. Underground Ducts for Telephone, Communications, or Data Utility Service Cables: RNC, NEMA Type EPC-40-PVC, in concrete-encased duct bank, unless otherwise indicated.
- C. Manholes: Precast Concrete.
 - 1. Units Located in Roadways and Other Deliberate Traffic Paths by Heavy or Medium Vehicles: H-20 structural load rating according to AASHTO HB 17.
 - 2. Units Not Located in Deliberate Traffic Paths by Heavy or Medium Vehicles: H-10 load rating according to AASHTO HB 17.

E 260543.3.2 EARTHWORK

- A. Excavation and Backfill: Do not use heavy-duty, hydraulic-operated, compaction equipment.
- B. Restore surface features at areas disturbed by excavation and reestablish original grades, unless otherwise indicated. Replace removed sod immediately after backfilling is completed.
- C. Restore areas disturbed by trenching, storing of dirt, cable laying, and other work. Restore vegetation and include necessary topsoiling, fertilizing, liming, seeding, sodding, sprigging, and mulching.
- D. Cut and patch existing pavement in the path of underground ducts and utility structures.

E 260543.3.3 DUCT INSTALLATION

- A. Slope: Pitch ducts a minimum slope of 1:300 down toward manholes and away from buildings and equipment. Slope ducts from a high point in runs between two manholes to drain in both directions.
- B. Curves and Bends: Use 5-degree angle couplings for small changes in direction. Use manufactured long sweep bends with a minimum radius of 12.5 feet, both horizontally and vertically, at other locations, unless otherwise indicated.
- C. Joints: Use solvent-cemented joints in ducts and fittings and make watertight according to manufacturer's written instructions. Stagger couplings so those of adjacent ducts do not lie in same plane.
- D. Duct Entrances to Manholes: Use end bells, spaced approximately 10 inches o.c. for 5-inch ducts, and vary proportionately for other duct sizes.
 - 1. Begin change from regular spacing to end-bell spacing 10 feet from the end bell without reducing duct line slope and without forming a trap in the line.
 - 2. Grout end bells into structure walls from both sides to provide watertight entrances.
- E. Sealing: Provide temporary closure at terminations of ducts that have cables pulled. Seal spare ducts at terminations. Use sealing compound and plugs to withstand at least 15-psig hydrostatic pressure.
- F. Pulling Cord: Install 100-lbf- test nylon cord in ducts, including spares.
- G. Concrete-Encased Ducts: Support ducts on duct separators.
 - 1. Separator Installation: Space separators close enough to prevent sagging and deforming of ducts, with not less than 5 spacers per 20 feet of duct. Secure separators to earth and to ducts to prevent floating during concreting. Stagger separators approximately 6 inches between tiers. Tie entire assembly together using fabric straps; do not use tie wires or reinforcing steel that may form conductive or magnetic loops around ducts or duct groups.
 - 2. Concreting Sequence: Pour each run of envelope between manholes or other terminations in one continuous operation.
 - a. Start at one end and finish at the other, allowing for expansion and contraction of ducts as their temperature changes during and after the pour. Use expansion fittings installed according to manufacturer's written recommendations, or use other specific measures to prevent expansion-contraction damage.
 - b. If more than one pour is necessary, terminate each pour in a vertical plane and install 3/4-inch reinforcing rod dowels extending 18 inches into concrete on both sides of joint near corners of envelope.
 - 3. Pouring Concrete: Spade concrete carefully during pours to prevent voids under and between conduits and at exterior surface of envelope. Do not allow a heavy mass of concrete to fall directly onto ducts. Use a plank to direct concrete down sides of bank assembly to trench bottom. Allow concrete to flow to center of bank and rise up in middle, uniformly filling all open spaces. Do not use power-driven agitating equipment unless specifically designed for duct-bank application.
 - 4. Reinforcement: Reinforce concrete-encased duct banks where they cross disturbed earth and where indicated. Arrange reinforcing rods and ties without forming conductive or magnetic loops around ducts or duct groups.
 - 5. Forms: Use walls of trench to form side walls of duct bank where soil is self-supporting and concrete envelope can be poured without soil inclusions; otherwise, use forms.
 - 6. Minimum Space between Ducts: 3 inches between ducts and exterior envelope wall, 2 inches between ducts for like services, and 4 inches between power and signal ducts.

7. Depth: Install top of duct bank at least 24 inches below finished grade in areas not subject to deliberate traffic, and at least 30 inches below finished grade in deliberate traffic paths for vehicles, unless otherwise indicated.
8. Warning Tape: Bury warning tape approximately 12 inches above all concrete-encased ducts and duct banks. Align tape parallel to and within 3 inches of the centerline of duct bank. Provide an additional warning tape for each 12-inch increment of duct bank width over a nominal 18 inches. Space additional tapes 12 inches apart, horizontally.

E 260543.3.4 INSTALLATION OF CONCRETE MANHOLES

- A. Precast Concrete Manhole Installation:
 1. Comply with ASTM C 891, unless otherwise indicated.
 2. Install units level and plumb and with orientation and depth coordinated with connecting ducts to minimize bends and deflections required for proper entrances.
 3. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1-inch sieve to No. 4 (sieve and compacted to same density as adjacent undisturbed earth).
- B. Elevations:
 1. Manhole Roof: Install with rooftop at least 15 inches below finished grade.
 2. Manhole Frame: In paved areas and trafficways, set frames flush with finished grade. Set other manhole frames 1 inch above finished grade.
- C. Drainage: Install drains in bottom of manholes where indicated. Coordinate with drainage provisions indicated.
- D. Manhole Access: Circular opening in manhole roof; sized to match cover size.
 1. Install chimney, constructed of precast concrete collars and rings to support frame and cover and to connect cover with manhole roof opening. Provide moisture-tight masonry joints and waterproof grouting for cast-iron frame to chimney.
- E. Waterproofing: Apply waterproofing to exterior surfaces of manholes after concrete has cured at least three days. Waterproofing materials and installation are specified in Division 07 Section "Thermoplastic Sheet Waterproofing." After ducts have been connected and grouted, and before backfilling, waterproof joints and connections and touch up abrasions and scars. Waterproof exterior of manhole chimneys after mortar has cured at least three days.
- F. Dampproofing: Apply dampproofing to exterior surfaces of manholes after concrete has cured at least three days. Dampproofing materials and installation are specified in Division 07 Section "Bituminous Dampproofing." After ducts have been connected and grouted, and before backfilling, dampproof joints and connections and touch up abrasions and scars. Dampproof exterior of manhole chimneys after mortar has cured at least three days.
- G. Hardware: Install removable hardware, including pulling eyes, cable stanchions, and cable arms, and insulators, as required for installation and support of cables and conductors and as indicated.
- H. Field-Installed Bolting Anchors in Manholes: Do not drill deeper than 3-7/8 inches for manholes, for anchor bolts installed in the field. Use a minimum of two anchors for each cable stanchion.
- I. Warning Sign: Install "Confined Space Hazard" warning sign on the inside surface of each manhole cover.

E 260543.3.5 GROUNDING

Ground underground ducts and utility structures according to Specification Section "Grounding and Bonding for Electrical Systems."

E 260543.3.6 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections and prepare test reports:

1. Demonstrate capability and compliance with requirements on completion of installation of underground ducts and utility structures.
2. Pull aluminum or wood test mandrel through duct to prove joint integrity and test for out-of-round duct. Provide mandrel equal to 80 percent fill of duct. If obstructions are indicated, remove obstructions and retest.
3. Test manhole grounding to ensure electrical continuity of grounding and bonding connections. Measure and report ground resistance as specified in Specification Section "Grounding and Bonding for Electrical Systems."

B. Correct deficiencies and retest as specified above to demonstrate compliance.

E 260543.3.7 CLEANING

A. Pull leather-washer-type duct cleaner, with graduated washer sizes, through full length of ducts. Follow with rubber duct swab for final cleaning and to assist in spreading lubricant throughout ducts.

B. Clean internal surfaces of manholes, including sump. Remove foreign material.

PART 4 - MEASUREMENT AND PAYMENT

E 260543.4.1 MEASUREMENT

A. Concrete Encased Ductbank with PVC Schedule 80 Conduits and all accessories will be measured by LINEAR-FOOT of ductbank furnished and installed.

1. Ductbank with nine (9) 2" Dia. PVC Sch 80 Conduits under Roadway
2. Ductbank with two (2) 2" Dia. PVC Sch 80 Conduits under Roadway

B. Prefabricated Concrete Manhole with Cast Iron Frame and Cover with all accessories suitable for (8) 2" Dia PVC Conduits entries including concrete base bed with Stainless Steel Manhole I.D. Tag

C. Nylon Pull Rope run in PVC Conduit

D. Warning Tape run over underground concrete ductbank for MV and Telephone ductbank

E. Excavation/ Trenching and Backfilling for concrete ductbank Removal, installation of new concrete ductbank:

1. In lawn area
2. On Roadway

F. Restoration of Roadway: Refer to Refer to contract plans, details and specifications for pavement restoration items.

E 260543.4.2 PRICE TO COVER

The linear-foot price bid for the underground ductbank will include, but not be limited to, the cost of furnishing all the labor, materials, equipment, and insurance necessary to complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

A. Concrete Ductbank: Includes supply conduits and reinforced steel, concrete, spacers, End Bells to be provided conduits entering manholes, etc. and installation. It shall include 1" Steel plate to be provided along above ductbank run on roadway.

B. Prefabricated Manholes: Includes supply of concrete manholes and cast iron cover. Includes identification Tags, Cable Stanchions, Cable racks, floor cable supports, and wall mounted utility grade insulated cable supports for MV cables. Include installation of manhole with all accessories and cover frame and cover. Supply one ladder per manhole. It shall include trenching and backfilling earth work required as necessary.

C. Nylon Pull Rope: Supply and Installation of Pull Rope in conduit.

D. Warning Tape: Supply and installation of Warning Tape (MV electric cable underground or Telecommunication cable underground).

E. Excavation and Trenching for conduit ductbank and backfilling: Includes excavating the utility trench to the depth and width specified on the contract drawing and all necessary materials, sheeting and equipment required tools for excavation of earth including dewatering equipment as necessary. For backfilling after installation contractor shall

provide loose fine sand, backfill material and compacting equipment. Remove remaining earth from site. Top soil and sodding for trenches in lawn areas.

- F. Road Restoration Work: Refer to contract plans, details and specifications for pavement restoration items.
- G. Removal of existing underground conduit ductbank for medium voltage 5 kV, 27 kV and telephone cables: Ductbank removal shall include demolition from site.

Payment will be made under:

Item No.	Description	Pay Unit
E 260543 A	DUCTBANK WITH NINE (9) 2" DIA. CONDUITS AND ONE (1) 1" DIA. CONDUIT UNDER ROADWAY	LINEAR-FOOT
E 260543 B	DUCTBANK WITH TWO (2) 2" DIA. CONDUITS UNDER ROADWAY	LINEAR-FOOT

END OF SECTION E 260543

**SECTION E 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS
(NOT A BID ITEM)**

PART 1 - GENERAL

E 260553.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract apply to this Section.

E 260553.1.2 SUMMARY

Section Includes:

1. Color and legend requirements for raceways, conductors, and warning labels and signs.
2. Labels for equipment, wiring devices, control stations, etc.
3. Bands and tubes.
4. Tapes and stencils.
5. Tags.
6. Signs.
7. Cable ties.
8. Paint for identification.
9. Fasteners for labels and signs.
10. Panelboard directories.

E 260553.1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for electrical identification products.
- B. Identification Schedule: For each piece of electrical equipment and electrical system components to be an index of nomenclature for electrical equipment and system components used in identification signs and labels. Use same designations indicated on Drawings.
- C. Delegated-Design Submittal: For arc-flash hazard study.

PART 2 - PRODUCTS

E 260553.2.1 PERFORMANCE REQUIREMENTS

- A. Comply with ASME A13.1 and IEEE C2.
- B. Comply with NFPA 70.
- C. Comply with OSHA Specifications for accident prevention signs contained in the Code of Federal Regulations as 29 CFR 1910.144 and 29 CFR 1910.145.
- D. Comply with ANSI Z535.4 for safety signs and labels.
- E. Comply with NFPA 70E and Section 260573.19 "Arc-Flash Hazard Analysis" requirements for arc-flash warning labels.
- F. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, must comply with UL 969.
- G. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

E 260553.2.2 COLOR AND LEGEND REQUIREMENTS

- A. Raceways and Cables Carrying Power Circuits at 600 V or Less:
 1. Black letters on an orange field.
 2. Legend: Indicate voltage and system or service type.
- B. Color-Coding for Phase- and Voltage-Level Identification, 600 V or Less: Use colors listed below for service feeder and branch-circuit conductors.
 1. Color must be factory applied or field applied for sizes larger than No. 8 AWG if authorities having jurisdiction permit.

2. Colors for 208/120-V Circuits:
 - a. Phase A: Black.
 - b. Phase B: Red.
 - c. Phase C: Blue.
 - d. Neutral: White.
 3. Colors for 480/277-V Circuits:
 - a. Phase A: Brown.
 - b. Phase B: Orange.
 - c. Phase C: Yellow.
 - e. Neutral: Gray.
 4. Color for Equipment Grounds: Green.
- C. Raceways and Cables Carrying Power Circuits at More Than 600 V:
1. Black letters on an orange field.
 2. Legend: "DANGER - CONCEALED HIGH VOLTAGE WIRING."
- D. Warning Label Colors:
1. Identify system voltage with black letters on an orange background.
- E. Warning labels and signs must include, but are not limited to, the following legends:
1. High Voltage Warning: "WARNING - HIGH VOLTAGE - KEEP OUT".
- F. Equipment Identification Labels:
1. Black letters on a white field.
- E 260553.2.3 LABELS
- A. Self-Adhesive Wraparound Labels: Preprinted Write-on, 3-mil-0.08-mm- thick, polyester vinyl flexible label with acrylic pressure-sensitive adhesive.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 - a. AnD Cable Products. 5356 Clayton Rd Suite 101C, Concord, CA 94521. <https://andcable.com/> (800) 394-3008.
 - b. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223. <https://www.bradyid.com/> (888) 250-3082.
 - c. Brother International Corporation. 200 Crossing Blvd, Bridgewater Township, NJ 08807. <https://www.brother-usa.com/about-brother-international> (908) 704-1700.
 - d. emedco. <https://www.emedco.com/> (800) 442-3633.
 - e. Grafoplast Wire Markers Inc. 6875 E 48th Ave, Denver, CO 80216. <https://grafoplast.com/> (303) 321-5995.
 - f. Ideal Industries, Inc. 1375 Park Ave. Sycamore, IL 60178 USA. <https://www.idealindustries.com/> (815) 895-5181.
 - g. Marking Services, Inc. 8265 N. Faulkner Road, Milkwaukee, WI, 53224. <https://www.markserv.com/> (800) 234-0135.
 - h. Panduit Corp. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487. <https://www.panduit.com/> (800) 777-3300.
 - i. Seton Identification Products. PO Box 458, Buffalo, NY 14240-0458. <https://www.seton.com/> (800) 243-6624.
- B. Self-Adhesive Labels: Polyester Vinyl, thermal, transfer-printed, 3-mil-0.08-mm- thick, multicolor, weather- and UV-resistant, pressure-sensitive adhesive labels, configured for intended use and location.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 - a. AnD Cable Products. 5356 Clayton Rd Suite 101C, Concord, CA 94521. <https://andcable.com/> (800) 394-3008.

- b. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - c. Brother International Corporation. 200 Crossing Blvd, Bridgewater Township, NJ 08807. <https://www.brother-usa.com/about-brother-international> (908) 704-1700.
 - d. emedco. <https://www.emedco.com/> (800) 442-3633.
 - e. Grafoplast Wire Markers Inc. 6875 E 48th Ave, Denver, CO 80216.
<https://grafoplast.com/> (303) 321-5995.
 - f. HellermannTyton. 7930 N. Faulkner Road, P.O. Box 245017, Milwaukee, WI 53224. <https://www.hellermanntyton.us/> (800) 537-1512.
 - g. Ideal Industries, Inc. 1375 Park Ave. Sycamore, IL 60178 USA.
<https://www.idealindustries.com/> (815) 895-5181.
 - h. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
 - i. Panduit Corp. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487.
<https://www.panduit.com/> (800) 777-3300.
 - j. Seton Identification Products. PO Box 458, Buffalo, NY 14240-0458.
<https://www.seton.com/> (800) 243-6624.
2. Minimum Nominal Size:
- a. 1-1/2 by 6 inches (37 by 150 mm) for raceway and conductors.
 - b. 3-1/2 by 5 inches (76 by 127 mm) for equipment.
 - c. As required by authorities having jurisdiction.
- E 260553.2.4 BANDS AND TUBES
- A. Snap-around, Color-Coding Bands: Slit, pretensioned, flexible, solid-colored acrylic sleeves, 2 inches (50 mm) long, with diameters sized to suit diameters and that stay in place by gripping action.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
- a. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - b. HellermannTyton. 7930 N. Faulkner Road, P.O. Box 245017, Milwaukee, WI 53224. <https://www.hellermanntyton.us/> (800) 537-1512.
 - c. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
 - d. Panduit Corp. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487.
<https://www.panduit.com/> (800) 777-3300.
- B. Heat-Shrink Preprinted Tubes: Flame-retardant polyolefin tubes with machine-printed identification labels, sized to suit diameter and shrunk to fit firmly. Full shrink recovery occurs at a maximum of 200 deg F (93 deg C). Comply with UL 224.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
- a. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - b. Panduit Corp. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487.
<https://www.panduit.com/> (800) 777-3300.
 - c. DYMO. <https://www.dymo.com/> +1(877) 724-8324.
- E 260553.2.5 TAPES AND STENCILS
- A. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; not less than 3 mils0.08 mm thick by 1 to 2 inches (25 to 50 mm) wide; compounded for outdoor use.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 - a. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - b. Carlton Industries, LP. <https://www.carltonusa.com/> +1(800) 231-5988.
 - c. emedco. <https://www.emedco.com/> (800) 442-3633.
 - d. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
 - B. Underground-Line Warning Tape:
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 - a. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - b. Ideal Industries, Inc. 1375 Park Ave. Sycamore, IL 60178 USA.
<https://www.idealindustries.com/> (815) 895-5181.
 - c. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
 - d. Reef Industries, Inc. 10020 Mykawa Road, Houston, TX 77048.
<https://www.reefindustries.com/> (800) 231-6074
 - e. Seton Identification Products. PO Box 458, Buffalo, NY 14240-0458.
<https://www.seton.com/> (800) 243-6624.
 2. Tape:
 - a. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical and communications utility lines.
 - b. Printing on tape must be permanent and must not be damaged by burial operations.
 - c. Tape material and ink must be chemically inert and not subject to degradation when exposed to acids, alkalis, and other destructive substances commonly found in soils.
 3. Color and Printing:
 - a. Comply with ANSI Z535.1, ANSI Z535.2, ANSI Z535.3, ANSI Z535.4, and ANSI Z535.5.
 - b. Inscriptions for Red-Colored Tapes: "ELECTRIC LINE, HIGH VOLTAGE".
 4. Tag:
 - a. Detectable three-layer laminate, consisting of a printed pigmented polyolefin film, a solid aluminum-foil core, and a clear protective film that allows inspection of the continuity of the conductive core; bright yellow-colored, continuous-printed on one side with the inscription of the utility, compounded for direct-burial service.
 - b. Width: 3 inches (75 mm).
 - c. Overall Thickness: 5 mils (0.125 mm).
 - d. Foil Core Thickness: 0.35 mil (0.00889 mm).
 - e. Weight: 28 lb/1000 sq. ft. (13.7 kg/100 sq. m).
 - f. Tensile according to ASTM D 882: 70 lbf (311.3 N) and 4600 psi (31.7 MPa).
 - C. Stenciled Legend: In nonfading, waterproof, black ink or paint. Minimum letter height must be 1 inch (25 mm).
- E 260553.2.6 TAGS
- Metal Tags: Brass or aluminum, 2 by 2 by 0.05 inch (50 by 50 by 1.3 mm), with stamped legend, punched for use with self-locking cable tie fastener.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 - a. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - b. Carlton Industries, LP. <https://www.carltonusa.com/> +1(800) 231-5988.
 - c. emedco. <https://www.emedco.com/> (800) 442-3633.
 - d. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
 - e. Seton Identification Products. PO Box 458, Buffalo, NY 14240-0458.
<https://www.seton.com/> (800) 243-6624.

E 260553.2.7 SIGNS

Laminated Acrylic or Melamine Plastic Signs:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 - a. Brady Corporation. 6555 W. Good Hope Rd., Milwaukee, WI 53223.
<https://www.bradyid.com/> (888) 250-3082.
 - b. Carlton Industries, LP. <https://www.carltonusa.com/> +1(800) 231-5988.
 - c. emedco. <https://www.emedco.com/> (800) 442-3633.
 - d. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
2. Engraved legend.
3. Thickness:
 - a. For signs up to 20 sq. in. (129 sq. cm), minimum 1/16 inch (1.6 mm) thick.
 - b. For signs larger than 20 sq. in. (129 sq. cm), 1/8 inch (3.2 mm) thick.
4. Engraved legend with black letters on white face. Emergency panels must have white letters on red face.
5. Minimum letter height must be 3/4 inch (10 mm) unless otherwise indicated.
6. Permanent self-adhesive.
7. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

E 260553.2.8 CABLE TIES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved alternative:
 1. HellermannTyton. 7930 N. Faulkner Road, P.O. Box 245017, Milwaukee, WI 53224. <https://www.hellermanntyton.us/> (800) 537-1512.
 2. Ideal Industries, Inc. 1375 Park Ave. Sycamore, IL 60178 USA.
<https://www.idealindustries.com/> (815) 895-5181.
 3. Marking Services, Inc. 8265 N. Faulkner Road, Milwaukee, WI, 53224.
<https://www.markserv.com/> (800) 234-0135.
 4. Panduit Corp. Tinley Park, 18900 Panduit Drive, Tinley Park, IL 60487.
<https://www.panduit.com/> (800) 777-3300.
- B. General-Purpose Cable Ties: Fungus inert, self-extinguishing, one piece, self-locking, and Type 6/6 nylon.
 1. Minimum Width: 3/16 inch (5 mm).
 2. Tensile Strength at 73 Deg F (23 Deg C) according to ASTM D 638: 12,000 psi (82.7 MPa).
 3. Temperature Range: Minus 40 to plus 185 deg F (Minus 40 to plus 85 deg C).
 4. Color: Black, except where used for color-coding.
- C. UV-Stabilized Cable Ties: Fungus inert, designed for continuous exposure to exterior sunlight, self-extinguishing, one piece, self-locking, and Type 6/6 nylon.
 1. Minimum Width: 3/16 inch (5 mm).

2. Tensile Strength at 73 Deg F (23 Deg C) according to ASTM D 638: 12,000 psi (82.7 MPa).
 3. Temperature Range: Minus 40 to plus 185 deg F (Minus 40 to plus 85 deg C).
 4. Color: Black.
- D. Plenum-Rated Cable Ties: Self-extinguishing, UV stabilized, one piece, and self-locking.
1. Minimum Width: 3/16 inch (5 mm).
 2. Tensile Strength at 73 Deg F (23 Deg C) according to ASTM D 638: 7000 psi (48.2 MPa).
 3. UL 94 Flame Rating: 94V-0.
 4. Temperature Range: Minus 50 to plus 284 deg F (Minus 46 to plus 140 deg C).
 5. Color: Black.

E 260553.2.9 MISCELLANEOUS IDENTIFICATION PRODUCTS

- A. Paint: Comply with requirements in painting Sections for paint materials and application requirements. Retain paint system applicable for surface material and location (exterior or interior).
- B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.
- C. Device Plate Labels: Permanent self-adhesive backed, 3/8 inch (10 mm) wide, clear heavy-duty acrylic tape with machine printed 1/4 inch (6 mm) high black letters. Impression letters on plastic tape are not acceptable.
- D. Underground Line Concrete Markers: 12 inches square by 4 inches thick concrete, chamfered top edges, arrows with stamped legend indicating route and type of underground line.

PART 3 - EXECUTION

E 260553.3.1 PREPARATION

- A. Coordinate identification names, abbreviations, colors, and other features with requirements in the Contract Documents, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual, and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.
- B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- C. Coordinate installation of identifying devices with location of access panels and doors.
- D. Install identifying devices before installing acoustical ceilings and similar concealment.
- E. Self-Adhesive Identification Products: Before applying electrical identification products, clean substrates of substances that could impair bond, using materials and methods recommended by manufacturer of identification product.

E 260553.3.2 INSTALLATION

- A. Verify and coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and operation and maintenance manual. Use consistent designations throughout Project.
- B. Verify identity of each item before installing identification products.
- C. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and operation and maintenance manual.
- D. Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment. Install access doors or panels to provide view of identifying devices.
- E. Apply identification devices to surfaces that require finish after completing finish work.
- F. Self-Adhesive Identification Products: Clean surfaces before application using materials and methods recommended by manufacturer of identification device.

- G. Install signs with approved legend to facilitate proper identification, operation, and maintenance of electrical systems and connected items.
- H. System Identification for Raceways and Cables under 600 V: Identification must completely encircle cable or conduit. Place identification of two-color markings in contact, side by side.
 - 1. Secure tight to surface of conductor, cable, or raceway.
- I. System Identification for Raceways and Cables over 600 V: Identification must completely encircle cable or conduit. Place adjacent identification of two-color markings in contact, side by side.
 - 1. Secure tight to surface of conductor, cable, or raceway.
- J. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.
- K. Emergency Operating Instruction Signs: Install instruction signs with white legend on a red background with minimum 3/8-inch-10-mm- high letters for emergency instructions at equipment used for power transfer or load shedding.
- L. Elevated Components: Increase sizes of labels, signs, and letters to those appropriate for viewing from the floor.
- M. Vinyl Wraparound Labels:
 - 1. Secure tight to surface of raceway or cable at a location with high visibility and accessibility.
 - 2. Attach labels that are not self-adhesive type with clear vinyl tape, with adhesive appropriate to the location and substrate.
- N. Snap-around Labels: Secure tight to surface at a location with high visibility and accessibility.
- O. Self-Adhesive Wraparound Labels: Secure tight to surface at a location with high visibility and accessibility.
- P. Self-Adhesive Labels:
 - 1. On each item, install unique designation label that is consistent with wiring diagrams, schedules, and operation and maintenance manual.
 - 2. Unless otherwise indicated, provide a single line of text with 1/2-inch- (13-mm-) high letters on 1-1/2-inch- (38-mm-) high label; where two lines of text are required, use labels 2 inches (50 mm) high.
- Q. Snap-around Color-Coding Bands: Secure tight to surface at a location with high visibility and accessibility.
- R. Heat-Shrink, Preprinted Tubes: Secure tight to surface at a location with high visibility and accessibility.
- S. Marker Tapes: Secure tight to surface at a location with high visibility and accessibility.
- T. Self-Adhesive Vinyl Tape: Secure tight to surface at a location with high visibility and accessibility.
 - 1. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches (150 mm) where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding.
- U. Tape and Stencil: Comply with requirements in painting Sections for surface preparation and paint application.
- V. Floor Marking Tape: Apply stripes to finished surfaces following manufacturer's written instructions.
- W. Underground Line Warning Tape:
 - 1. During backfilling of trenches, install continuous underground-line warning tape directly above cable or raceway at 12 inches (150 to 200 mm) below finished grade. Use multiple tapes where width of multiple lines installed in a common trench or concrete envelope exceeds 16 inches (400 mm) overall.

2. Install underground-line warning tape for direct-buried cables and cables in raceways.
- X. Metal Tags:
1. Place in a location with high visibility and accessibility.
 2. Secure using UV-stabilized and plenum-rated cable ties.
- Y. Laminated Acrylic or Melamine Plastic Signs:
1. Attach signs that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
 2. Unless otherwise indicated, provide a single line of text with 1/2-inch- (13-mm-) high letters on 1-1/2-inch- (38-mm-) high sign; where two lines of text are required, use labels 2 inches (50 mm) high.
- Z. Cable Ties: General purpose, for attaching tags, except as listed below:
1. Outdoors: UV-stabilized nylon.
 2. In Spaces Handling Environmental Air: Plenum rated.
- E 260553.3.3 IDENTIFICATION SCHEDULE
- A. Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment. Install access doors or panels to provide view of identifying devices.
- B. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, pull points, and locations of high visibility. Identify by system and circuit designation.
- C. Accessible Raceways and Metal-Clad Cables, 600 V or Less, for Service, Feeder, and Branch Circuits, More Than 30 A and 120 V to Ground: Identify with self-adhesive raceway labels.
1. Locate identification at changes in direction, at both sides of penetrations of walls and floors, at 30-foot (15-m) maximum intervals in straight runs, and at 15-foot (7.6-m) maximum intervals in congested areas.
- D. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use self-adhesive vinyl tape to identify the phase. Locate at each load or terminal connection in control panels and panel-board gutters. Use self-adhesive wraparound labels to identify source, circuit number, and voltage of each set of conductors.
- E. Control-Circuit Conductor Identification: For conductors and cables in pull and junction boxes, manholes, and handholes, use self-adhesive labels with the conductor or cable designation, origin, and destination. Handwritten lettering is not acceptable. For wires of different systems in common boxes, group each cable with its own system and identify each cable to indicate appropriate system.
- F. Control-Circuit Conductor Termination Identification: For identification at terminations, provide self-adhesive labels with the conductor designation. Include wire number or terminal number from schematic, or interconnection diagrams on installation or shop drawings.
- G. Motor Control Labels: Provide typed label inside each motor starter, adjustable frequency drive, etc., including those furnished by other divisions, identifying motor served, horsepower, voltage, phase, full-load current, code letter, and design letter.
- H. Conductors to Be Extended in the Future: Attach marker tape to conductors and list source.
- I. Auxiliary Electrical Systems Conductor Identification: Self-adhesive vinyl tape that is uniform and consistent with system used by manufacturer for factory-installed connections.
1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.

- J. Junction and Pull Box Identification: Stencil or neatly identify with permanent marker all junction and pull boxes as follows:
 - 1. Lighting and Power - 208V, 240V or 480V, circuit numbers enclosed including panelboard names
 - 2. Primary (Medium Voltage) - 15 kV (Verify voltage with Utility)
 - 3. Data - DAT
- K. Empty and/or Spare Raceways: Install identification tag stamped to indicate conduit destination and future use, i.e., sound, telephone, electric, etc.
- L. Locations of Underground Lines: Underground-line warning tape for power, lighting, communication, and control wiring and optical-fiber cable.
 - 1. Install underground-line warning tape for direct-buried cables and cables in raceways.
- M. Instructional Signs: Self-adhesive labels, including the color code for grounded and ungrounded conductors.
- N. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Self-adhesive labels.
 - 1. Apply to exterior of door, cover, or other access.
 - 2. For equipment with multiple power or control sources, apply to door or cover of equipment, including, but not limited to, the following:
 - a. Power-transfer switches.
 - b. Controls with external control power connections.
 - 3. For equipment requiring workspace clearance according to NFPA 70, apply to door or cover of equipment, but not on flush panelboards and similar equipment in finished spaces, unless noted otherwise.
- O. Warning Labels for High Voltage Equipment and Boxes: Locate on entrance doors to each electrical room containing high voltage equipment, on each primary switch, on each unit substation, on each padmount transformer and on each junction box containing high voltage cable.
- P. Arc Flash Warning Labeling: Self-adhesive labels.
 - 1. Comply with NFPA 70 and NFPA 70E and ANSI Z535.4.
- Q. Operating Instruction Signs: Laminated acrylic or melamine plastic signs.
- R. Emergency Operating Instruction Signs: Laminated acrylic or melamine plastic signs with white legend on a red background with minimum 3/8-inch- (10-mm-) high letters for emergency instructions at equipment used for power transfer load shedding.
- S. Equipment Identification Labels:
 - 1. Label all equipment.
 - 2. Utilize unique designation that is consistent with drawings, wiring diagrams, schedules, and operation and maintenance manual. Include equipment type, e.g.: UNIT SUB, MCC, DP, SWBD, ATS, XFMR, PNL, BUSWAY, etc.
 - 3. Verify all equipment names with Owner and Engineer prior to making labels.
 - 4. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system.
 - 5. Systems include power, lighting, control, communication, signal, monitoring, and alarm, unless equipment is provided with its own identification.
 - 6. Outdoor Equipment: Stenciled legend 4 inches (100 mm) high.
 - 7. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
 - 8. Equipment to Be Labeled, must include, but not be limited to, the following:

- a. Panelboards: Typewritten directory of circuits in the location provided by panelboard manufacturer. Panelboard identification must be in the form of a self-adhesive, engraved, laminated acrylic or melamine label.
 - b. Enclosures and electrical cabinets.
 - c. Transformers: Label that includes tag designation indicated on Drawings for the transformer, feeder, and panelboards or equipment supplied by the secondary.
 - d. Enclosed switches.
 - e. Enclosed circuit breakers.
 - f. Enclosed controllers.
 - g. Push-button stations.
 - h. Power-transfer equipment.
 - i. Power-generating units.
 - j. Monitoring and control equipment.
9. Identify equipment on inside of cover of flush panels and on outside of cover of surface panels as follows:
- a. Lighting and Power Panels (black letters on white background) - PANEL DESIGNATION (3/4 inch high letters), VOLTAGE (1/4 inch high letters), SOURCE PANEL FEEDING THIS PANEL AND OWNER'S ROOM NUMBER WHERE SOURCE PANEL IS LOCATED (1/4 inch high letters).
 - b. Communications Cabinets - TELEPHONE OR OTHER USAGE (paging, etc.).
 - c. Data Cabinets - DATA.
10. Identify each main breaker or switch (primary and secondary) in all distribution equipment with laminated label similar to above.
11. Equip each branch device in all distribution panelboards, switchboards, motor control centers, busway, unit-substations, etc., with laminated label similar to above. Identify load served and location of load. Use identifications compatible with Owner's program. For adjustable-trip circuit breakers, identify trip setting.
- a. Identify all control devices, circuit breakers, disconnect switches, motor starters, contactors, time switches, test switches, etc, including those furnished by other divisions or with pre-purchased equipment, with equipment fed and Owner's room number where equipment is located, source panel or equipment feeding this device, and Owner's room number where source panel or equipment is located. Height of label may be decreased where mounting space for label is limited.
- T. Panelboard Directories:
- 1. Equip each branch circuit panelboard with typewritten or computer-generated directory accurately indicating Owner's room number and equipment name being served.
 - 2. Use identifications compatible with Owner's program, and readily identifiable without removing directory from its holder.
- U. Device Plate Identification
- 1. Label device plates of all wall switches, control stations, volume controls, etc., with permanent adhesive indicating equipment controlled.

PART 4 - BASIS OF PAYMENT

E 260553.4.1 Payment for Items described in this section must not be separately billed and must be included as part of other sections.

END OF SECTION E 260553

SECTION E 261213 - LIQUID-FILLED, MEDIUM-VOLTAGE TRANSFORMERS

PART 1 - GENERAL

E 261213.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract apply to this Section.

E 261213.1.2 SUMMARY

Section includes liquid-filled, medium-voltage substation transformers, with primary and secondary bushings within or without air-terminal enclosures.

E 261213.1.3 DEFINITIONS

BIL: Basic Impulse Insulation Level.

E 261213.1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include rated capacities, operating characteristics, and furnished specialties and accessories.
- B. Shop Drawings: For liquid-filled, medium-voltage transformers.
 - 1. Include plans and elevations showing major components and features.
 - a. Include a plan view and cross section of equipment base, showing clearances, manufacturer's recommended workspace, and locations of penetrations for grounding and conduits.
 - 2. Include details of equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 3. Include single-line diagram.
 - 4. Include list of materials.
 - 5. Include nameplate legends.

E 261213.1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings for Outdoor Installations:
 - 1. Utilities site plan, drawn to scale, showing heavy equipment or truck access paths for maintenance and replacement.
- B. Qualification Data: For testing agency.
- C. Seismic Qualification Certificates: For transformer assembly, accessories, and components, from manufacturer.
 - 1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
 - 2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity, and locate and describe mounting and anchorage provisions.
 - 3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
- D. Product Certificates: For transformers, signed by product manufacturer.
- E. Source quality-control reports.
- F. Field quality-control reports.

E 261213.1.6 CLOSEOUT SUBMITTALS

Operation and Maintenance Data: For transformer and accessories to include in emergency, operation, and maintenance manuals.

E 261213.1.7 QUALITY ASSURANCE

Testing Agency Qualifications: Member company of NETA or an NRTL.

- 1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

PART 2 - PRODUCTS

E 261213.2.1 MANUFACTURERS

- A. Eaton. <https://www.eaton.com/> +1(800) 498-2678.

- B. ABB. <https://new.abb.com/> +1(800) 435 7365.
- C. Howard Industries. 136 Main St #8, Westport, CT 06880.
<https://www.howardindustries.com/> (203) 227-4900.
- D. Or approved alternative

E 261213.2.2 SYSTEM DESCRIPTION

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with IEEE C2.
- C. Comply with IEEE C57.12.00.

E 261213.2.3 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: The transformers must withstand the effects of earthquake motions determined according to ASCE/SEI 7.
 1. The term "withstand" means "the transformer will remain in place without separation of any parts when subjected to the seismic forces specified
 2. Component Importance Factor: 1.0.
 3. Component Amplification Factor: 2.5.
 4. Component Response Modification Factor: 6.0.
- B. Windings Material: Copper.
- C. Surge Arresters: Comply with IEEE C62.11, Distribution Class; metal-oxide-varistor type, connected in each phase of incoming circuit and ahead of any disconnecting device.
- D. Winding Connections: The connection of windings and terminal markings must comply with IEEE C57.12.70.
- E. Efficiency: Comply with 10 CFR 431, Subpart K.
- F. Insulation:
 1. Transformer kVA Rating, when Indicated at 55/65 deg C Rise, Must Be as Follows: The average winding temperature rise above ambient temperature must not exceed 55 deg C, based on an average ambient temperature of 30 deg C over 24 hours with a maximum ambient temperature of 40 deg C. Insulation system must be rated to continuously allow an additional 12-percent kVA output, at 65 deg C temperature rise, without decreasing rated transformer life. The rating must conform to the requirements of IEEE C57.12.90.
- G. Bushings must comply with IEEE C57.19.01 requirements for impulse and low-frequency insulation levels.
- H. Tap Changer: External, for de-energized operation.
- I. Tank: Sealed, with welded-on cover.
- J. Mounting: An integral skid mounting frame, suitable to allow skidding or rolling of transformer in any direction, and with provision for anchoring frame to pad.
- K. Insulating Liquids:
 1. Mineral Oil: ASTM D3487, Type II, and tested for compliance with ASTM D117.
 2. Less-Flammable Liquids:
 - a. Edible-Seed-Oil-Based Dielectric: Listed and labeled by an NRTL as complying with NFPA 70 requirements for fire point of not less than 300 deg C when tested according to ASTM D92. Liquid must be biodegradable and nontoxic, having passed the Organization for Economic Co-operation and Development G.L.203 with zero mortality, and must be certified by the U.S. Environmental Protection Agency as biodegradable, meeting Environmental Technology Verification requirements.

- b. Biodegradable and Nontoxic Dielectric: Listed and labeled by an NRTL as complying with NFPA 70 requirements for fire point of not less than 300 deg C when tested according to ASTM D92.
 - c. Silicone-Based Dielectric: Listed and labeled by an NRTL as complying with NFPA 70 requirements for fire point of not less than 300 deg C when tested according to ASTM D92. Liquid must have low toxicity and be nonhazardous.
- L. Sound level must comply with NEMA TR 1 requirements.
- M. Capacities and Characteristics:
 - 1. Location: Outdoors.
 - 2. Additional IEEE Standards: Comply with IEEE C57.12.10.
 - 3. Comply with UL 1062 listing requirements.
 - 4. Comply with FM Global Class No. 3990.
 - 5. Comply with UL listing requirements for combination classification and listing for transformer and less-flammable insulating liquid.
 - 6. Service Conditions: Transformers must be suitable for operation under service conditions specified as usual service conditions in IEEE C57.12.00, except for the following:
 - a. Altitudes above 3300 feet (1000 m).
 - b. Cooling air or water temperature exceeds limits.
 - c. Excessive load current harmonic factor.
 - d. Operation above rated voltage or below rated frequency.
 - e. Exposure to explosive environments.
 - f. Exposure to fumes, vapors, or dust.
 - g. Exposure to hot and humid climate or to excessive moisture, including steam, salt spray, and dripping water.
 - h. Exposure to seismic shock or to abnormal vibration, shock, or tilting.
 - i. Exposure to excessively high or low temperatures.
 - j. Unusual transportation or storage conditions.
 - k. Unusual grounding-resistance conditions.
 - l. Unusual space limitations.
 - 7. Connections:
 - a. Primary: Air-filled terminal cabinet for cable connection
 - b. Secondary: Air-filled terminal cabinet for cable connection.
 - 8. Transformer Ratings. Comply with IEEE C57.12.00 for cooling class.
 - a. Self-Cooled Rating, Class OA
 - b. Future Forced-Air-Cooled Rating, Class OA/FA
 - 1) Self-Cooled: 45 kVA.
 - 2) Forced-Air Cooled: 50.4 kVA.
 - 3) Make provision for future addition of forced-air-cooling equipment. The transformer bushings, leads, and related components must be sized for the future equipment. Provide fan mounts, conduit supports, and terminal boxes.
 - c. Impedance: Manufacturer's Standard Design
 - d. Temperature Rise: 55/65 deg C.
 - e. Coils Connection:
 - 1) High-Voltage Winding: Delta.
 - 2) Low-Voltage Winding: Wye.
 - f. Voltage and BIL Ratings:
 - 1) Nominal primary phase-to-phase voltage and BIL: Per Utility Requirements.
 - 2) Nominal secondary voltage and BIL: 480Y/277 V, 45 kV.

- g. K-Factor: 1, complying with UL 1561.
- 9. Outdoor Transformer Enclosure Finish: Factory-applied finish in manufacturer's standard color, corrosion resistance complying with IEEE C57.12.28.
- 10. Special Corrosion-Resistant Enclosure Finish: Factory-applied, corrosion-resistant finish in manufacturer's standard color that withstands 480 hours of exposure to salt-spray test specified in ASTM B117 without loss of paint or release of adhesion of paint primer coat to metal surface in excess of 1/16 inch (1.6 mm) from test mark. Scribed test mark and test evaluation must be according to ASTM D1654 with a rating of not less than 7 according to Table 1 (Procedure A). Cut edges or otherwise damaged surfaces of hot-dip galvanized sheet steel, or mill-galvanized sheet steel must be coated with a manufacturer's standard zinc-rich paint.
- 11. Taps: Two 2-1/2-percent, full-capacity taps above, and two 2-1/2-percent, full-capacity taps below rated voltage. Comply with IEEE C57.12.36 requirements.
- 12. Provide duplicate nameplate installed on the exterior of the low-voltage air-compartment door.
- 13. Transformer Accessories:
 - a. Drain and filter connection.
 - b. Filling and top filter press connections.
 - c. Pressure-vacuum gauge.
 - d. Dial-type analog thermometer with alarm contacts.
 - e. Magnetic liquid level indicator with high and low alarm contacts.
 - f. Pressure-relief device set to operate at 10 psig, plus or minus 2 psig, and then automatically reseal when pressure drops to 6 psig minimum. Device flow must be as recommended by manufacturer. With alarm contacts and a manual bleeder.
 - g. At least four stainless-steel ground connection pads.
 - h. Provisions for jacking, lifting, and towing.
 - i. Machine-engraved nameplate made of anodized aluminum or stainless steel.
 - j. Sudden pressure relay for remote alarm or trip when internal transformer pressure rises at field-set rate. Provide with seal-in delay.

E 261213.2.4 CONTROL NETWORK

Controllers: Support serial MS/TP and Ethernet IP communications, and able to communicate directly via RS-485 serial networks and Ethernet 10Base-T networks as a native device.

E 261213.2.5 WARNING LABELS AND SIGNS

Comply with requirements for labels and signs specified in Section 260553 "Identification for Electrical Systems."

- 1. Warning signs must be made of baked enamel.
- 2. Equipment Identification Labels: Engraved, laminated-acrylic or -melamine label.

E 261213.2.6 SOURCE QUALITY CONTROL

- A. Provide manufacturer's certificate verifying the transformer design tests comply with IEEE C57.12.90.
- B. Perform the following factory-certified routine tests on each transformer for this Project:
 - 1. Resistance.
 - 2. Turns ratio, polarity, and phase relation.
 - 3. Transformer no-load losses and excitation current at 100 percent of ratings.
 - 4. Transformer impedance voltage and load loss.
 - 5. Operation of all devices.
 - 6. Control (auxiliary) and consumption losses.
 - 7. Lightning impulse.

8. Low frequency.
9. Leak.
10. Transformer no-load losses and excitation current at 110 percent of ratings.
11. Insulation power factor.
12. Applied potential.
13. Induced potential.
14. Resistance measurements of all windings on rated voltage connection and at tap extreme connections.
15. Ratios on rated voltage connection and at tap extreme connections.
16. Polarity and phase relation on the rated voltage connection.
17. No-load loss at rated voltage on the rated voltage connection.
18. Exciting current at rated voltage on the rated voltage connection.
19. Impedance.

- C. Owner will witness required factory tests. Notify Architect at least 14 days before date of tests and indicate their approximate duration.

PART 3 - EXECUTION

E 261213.3.1 EXAMINATION

- A. Examine liquid-filled, medium-voltage transformers upon delivery.
1. Upon delivery of transformers and prior to unloading, inspect equipment for any damage that may have occurred during shipment or storage.
 2. Verify that tie rods and chains are undamaged and tight, and that all blocking and bracing is tight. Verify that there is no evidence of load shifting in transit, and that readings from transportation shock recorders, if equipped, are within manufacturer's recommendations.
 3. Verify that there is no indication of external damage and no dents or scratches in doors and sill, tank walls, radiators and fins, or termination provisions.
 4. Verify that there is no evidence of insulating-liquid leakage on transformer surfaces, at weld seams, on high- or low-voltage bushing parts, and at transformer base.
 5. Verify that there is positive pressure or vacuum on the tank. Check the pressure gauge; it is required to read other than zero.
 6. Compare transformers and accessories received with bill of materials to verify that shipment is complete. Verify that transformers and accessories conform with manufacturer's quotation and shop drawings. If shipment is incomplete or does not comply with Project requirements, notify manufacturer in writing immediately.
 7. Verify presence of polychlorinated biphenyl content labeling.
 8. Unload transformers carefully, observing all packing label warnings and handling instructions.
 9. Open termination compartment doors and inspect components for damage or displaced parts, loose or broken connections, cracked or chipped insulators, bent mounting flanges, dirt or foreign material, and water or moisture.
- B. Handling:
1. Handle transformers carefully, in accordance with manufacturer recommendations, to avoid damage to enclosure, termination compartments, base, frame, tank, and internal components. Do not subject transformers to impact, jolting, jarring, or rough handling.
 2. Protect transformer termination compartments against entrance of dust, rain, and snow.
 3. Transport transformers upright, to avoid internal stresses on core and coil mounting assembly and to prevent trapping air in the windings. Do not tilt or tip transformers.

4. Verify that transformer weights are within rated capacity of handling equipment.
 5. Use only manufacturer-recommended points for lifting, jacking, and pulling. Use all lifting lugs when lifting transformers.
 6. Use jacks only at corners of tank base plate.
 7. Use nylon straps of same length to balance and distribute weight when handling transformers with a crane.
 8. Use spreaders or a lifting beam to obtain a vertical lift and to protect transformer from straps bearing against enclosure. Lifting cable pull angles may not be greater than 15 degrees from vertical.
 9. Exercise care not to damage tank base structure when handling transformer using skids or rollers. Use skids to distribute stresses over tank base when using rollers under large transformers.
- C. Storage:
1. Store transformers in accordance with manufacturer's recommendations.
 2. Transformers may be stored outdoors. If possible, store transformers at final installation locations on concrete pads. If dry concrete surfaces are unavailable, use pallets of adequate strength to protect transformers from direct contact with ground. Ensure transformer is level.
 3. Ensure that transformer storage location is clean and protected from severe conditions. Protect transformers from dirt, water, contamination, and physical damage. Do not store transformers in presence of corrosive or explosive gases. Protect transformers from weather when stored for more than three months.
 4. Store transformers with compartment doors closed.
 5. Regularly inspect transformers while in storage and maintain documentation of storage conditions, noting any discrepancies or adverse conditions. Verify that an effective pressure seal is maintained using pressure gauges. Visually check for insulating-liquid leaks and rust spots.
- D. Examine areas and space conditions for compliance with requirements for liquid-filled, medium-voltage transformers and other conditions affecting performance of the Work.
- E. Examine roughing-in of conduits and grounding systems to verify the following:
1. Wiring entries comply with layout requirements.
 2. Entries are within conduit-entry tolerances specified by manufacturer, and no feeders will cross section barriers to reach load or line lugs.
- F. Examine walls, floors, roofs, and concrete bases for suitable conditions for transformer installation.
- G. Pre-Installation Checks:
1. Verify removal of any shipping bracing after placement.
 2. Remove a sample of insulating liquid according to ASTM D923. Insulating-liquid values must comply with NETA ATS, Table 100.4. Sample must be tested for the following:
 - a. Dielectric Breakdown Voltage: ASTM D877 or ASTM D1816.
 - b. Acid Neutralization Number: ASTM D974.
 - c. Specific Gravity: ASTM D1298.
 - d. Interfacial Tension: ASTM D971.
 - e. Color: ASTM D1500.
 - f. Visual Condition: ASTM D1524.
 - g. Water in Insulating Liquids: ASTM D1533.
 - h. Power Factor or Dissipation Factor: ASTM D924.
- H. Verify that ground connections are in place and that requirements in Section 260526 "Grounding and Bonding for Electrical Systems" have been met. Maximum ground resistance must be 5 ohms at transformer location.

- I. Proceed with installation only after unsatisfactory conditions have been corrected.
- E 261213.3.2 INSTALLATION
- A. Transformer must be installed level and plumb and must tilt less than 1.5 degrees while energized.
 - B. Comply with requirements for vibration isolation specified in Section 260529 "Hangers and Supports for Electrical Systems".
 - C. Maintain minimum clearances and workspace at equipment according to manufacturer's written instructions and NFPA 70.
- E 261213.3.3 CONNECTIONS
- A. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."
 - 1. At Interior Locations: For grounding to grounding electrodes, use bare copper cable not smaller than No. 4/0 AWG. Bond surge arrester and neutrals directly to transformer enclosure and then to grounding electrode system with bare copper conductors. Keep leads as short as practicable, with no kinks or sharp bends. Make joints in grounding conductors and loops by exothermic weld or compression connector.
 - 2. At Exterior Locations:
 - a. For counterpoise, use tinned bare copper cable not smaller than No. 4/0 AWG, buried not less than 30 inches (765 mm) below grade interconnecting grounding electrodes. Bond surge arrester and neutrals directly to transformer enclosure and then to grounding electrode system with bare copper conductors. Keep lead lengths as short as practicable, with no kinks or sharp bends.
 - b. Fence and equipment connections must not be smaller than No. 4 AWG. Ground fence at each gate post and corner post and at intervals not exceeding 10 feet (3050 mm.) Bond each gate section to fence post using 1/8 by 1 inch (3 by 25 mm) tinned flexible braided copper strap and clamps.
 - c. Make joints in grounding conductors and loops by exothermic weld or compression connector.
 - 3. Terminate all grounding and bonding conductors on a common equipment grounding terminal on transformer enclosure. Install supplemental terminal bars, lugs, and bonding jumpers as required to accommodate number of conductors for termination.
 - 4. Complete transformer tank grounding and lightning arrester connections prior to making any other electrical connections.
 - B. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
 - 1. Maintain air clearances between energized live parts and between live parts and ground for exposed connections in accordance with manufacturer recommendations.
 - 2. Bundle associated phase, neutral, and equipment grounding conductors together within transformer enclosure. Arrange conductors such that there is not excessive strain that could cause loose connections. Allow adequate slack for expansion and contraction of conductors.
 - C. Termination of primary cabling must be performed by the Utility.
- E 261213.3.4 SIGNS AND LABELS
- A. Comply with installation requirements for labels and signs specified in Section 260553 "Identification for Electrical Systems."
 - B. Install warning signs as required to comply with 29 CFR 1910.269.

E 261213.3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- C. Perform the following tests and inspections:
 - 1. General Field-Testing Requirements:
 - a. Comply with provisions of NFPA 70B, Ch. "Testing and Test Methods."
 - b. Perform each visual and mechanical inspection and electrical test. Certify compliance with test parameters.
 - c. After installing transformer but before primary is energized, verify that grounding system at substation is tested at specified value or less.
 - d. After installing transformer and after electrical circuitry has been energized, test for compliance with requirements.
 - e. Visual and Mechanical Inspection:
 - 1) Verify equipment nameplate data complies with Contract Documents.
 - 2) Inspect bolted electrical connections for high resistance using one of the following two methods:
 - a) Use a low-resistance ohmmeter to compare bolted connection resistance values to values of similar connections. Investigate values that deviate from those of similar bolted connections by more than 50 percent of lowest value.
 - b) Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method according to manufacturer's published data or NETA ATS, Table 100.12. Bolt-torque levels must be according to manufacturer's published data. In absence of manufacturer's published data, use NETA ATS, Table 100.12.
 - f. Remove and replace malfunctioning units and retest.
 - g. Prepare test and inspection reports. Record as-left set points of all adjustable devices.
 - 2. Medium-Voltage Surge Arrester Field Tests:
 - a. Visual and Mechanical Inspection:
 - 1) Inspect physical and mechanical condition.
 - 2) Inspect anchorage, alignment, grounding, and clearances.
 - 3) Verify arresters are clean.
 - 4) Verify that ground lead on each device is individually attached to a ground bus or ground electrode.
 - 5) Verify that stroke counter is correctly mounted and electrically connected if applicable. Record stroke counter reading.
 - b. Electrical Test:
 - 1) Perform an insulation-resistance test on each arrester, phase terminal-to-ground. Apply voltage according to manufacturer's published data. In the absence of manufacturer's published data, comply with NETA ATS, Table 100.1. Replace units that fail to comply with recommended minimum insulation resistance listed in that table.
 - 2) Perform a watts-loss test. Evaluate watts-loss values by comparison with similar units and test equipment manufacturer's published data.
 - 3. Liquid-Filled Transformer Field Tests:
 - a. Visual and Mechanical Inspection:
 - 1) Test dew point of tank gases if applicable.
 - 2) Inspect anchorage, alignment, and grounding.

- 3) Verify bushings are clean.
 - 4) Verify that alarm, control, and trip settings on temperature and level indicators are set and operate within manufacturer's recommended settings.
 - 5) Verify that cooling fans and pumps operate correctly and have appropriate overcurrent protection.
 - 6) Verify that liquid level in tanks and bushings is within manufacturer's published tolerances.
 - 7) Perform specific inspections and mechanical tests recommended by manufacturer.
 - 8) Verify presence of transformer surge arresters and that their ratings are as specified.
 - 9) Verify that as-left tap connections are as specified.
 - 10) Verify presence of surge arresters and that their ratings are as specified.
- b. Electrical Tests:
- 1) Perform insulation-resistance tests winding-to-winding and each winding-to-ground. Apply voltage according to manufacturer's published data. In the absence of manufacturer's published data, comply with NETA ATS, Table 100.5. Calculate polarization index; the value of the index must not be less than 1.0.
 - 2) Perform power-factor or dissipation-factor tests on all windings according to test equipment manufacturer's published data. Maximum winding insulation power-factor/dissipation-factor values must be according to manufacturer's published data. In the absence of manufacturer's published data, comply with NETA ATS, Table 100.3.
 - 3) Measure core insulation resistance at 500-V dc if the core is insulated and the core ground strap is removable. Core insulation-resistance values must not be less than 1 megohm at 500-V dc.
 - 4) Perform a power-factor or dissipation-factor tip-up test on windings greater than 2.5 kV.
 - 5) Perform turns-ratio tests at tap positions. Turns-ratio test results must not deviate by more than one-half percent from either adjacent coils or calculated ratio. If test fails, replace transformer.
 - 6) Perform an excitation-current test on each phase. The typical excitation-current test data pattern for a three-legged core transformer is two similar current readings and one lower current reading. Investigate and correct if test shows a different pattern.
 - 7) Measure resistance of each winding at each tap connection, and record temperature-corrected winding-resistance values in Operations and Maintenance Manual.
 - 8) Perform an applied-voltage test on high- and low-voltage windings-to-ground. Comply with IEEE C57.12.91, Sections 10.2 and 10.9.
 - 9) Verify correct secondary voltage, phase-to-phase and phase-to-neutral, after energization and prior to loading.
 - 10) Remove a sample of insulating liquid according to ASTM D923, and perform dissolved-gas analysis according to IEEE C57.104 or ASTM D3612.

E 261213.3.6 FOLLOW-UP SERVICE

- A. Voltage Monitoring and Adjusting: After Substantial Completion, if requested by Owner, but not more than six months after Final Acceptance, perform the following voltage monitoring:
1. During a period of normal load cycles as evaluated by Owner, perform seven days of three-phase voltage recording at the outgoing section of each transformer. Use voltmeters with calibration traceable to the National Institute of Science and Technology standards and with a chart speed of not less than 1 inch (25 mm) per hour. Voltage unbalance greater than 1 percent between phases, or deviation of any phase voltage from the nominal value by more than plus or minus 5 percent during test period, is unacceptable.
 2. Corrective Action: If test results are unacceptable, perform the following corrective action, as appropriate:
 - a. Adjust transformer taps.
 - b. Prepare written request for voltage adjustment by electric utility.
 3. Retests: Repeat monitoring, after corrective action is performed, until satisfactory results are obtained.
 4. Report:
 - a. Prepare a written report covering monitoring performed and corrective action taken.
- B. Infrared Inspection: Perform survey during periods of maximum possible loading. Remove all necessary covers prior to inspection.
1. After Substantial Completion, but not more than 60 days after Final Acceptance, perform infrared inspection of transformer's electrical power connections.
 2. Instrument: Inspect distribution systems with imaging equipment capable of detecting a minimum temperature difference of 1 deg C at 30 deg C.
 3. Record of Infrared Inspection: Prepare a certified report that identifies testing technician and equipment used, and lists results as follows:
 - a. Description of equipment to be tested.
 - b. Discrepancies.
 - c. Temperature difference between area of concern and reference area.
 - d. Probable cause of temperature difference.
 - e. Areas inspected. Identify inaccessible and unobservable areas and equipment.
 - f. Identify load conditions at time of inspection.
 - g. Provide photographs and thermograms of deficient area.
 4. Act on inspection results according to recommendations of NETA ATS, Table 100.18. Correct possible and probable deficiencies as soon as Owner's operations permit. Retest until deficiencies are corrected.

E 261213.3.7 DEMONSTRATION

Train Owner's maintenance personnel to adjust, operate, and maintain systems.

PART 4 - MEASUREMENT AND PAYMENT

E 261213.4.1 MEASUREMENT

The pay unit for LIQUID-FILLED PAD-MOUNTED TRANSFORMER includes, but is not limited to, the procurement, shipment, insurance, and installation of EACH Liquid-filled pad-mount transformer.

E 261213.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

1. Transportation of liquid-filled pad-mount transformer

2. Installation of liquid-filled pad-mount transformer
3. Owner maintenance personnel training
4. Field Quality Controls and Inspection
5. Field-installed Identification
6. Conductor termination

Payment will be made under:

Item No.	Description	Pay Unit
E 261213	LIQUID-FILLED PAD-MOUNTED TRANSFORMER	EACH
END OF SECTION E 261213		

SECTION E 262416 - PANELBOARDS

PART 1 - GENERAL

E 264216.1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract apply to this Section.

E 264216.1.2 SUMMARY

Section Includes:

1. Distribution panelboards.
2. Lighting and appliance branch-circuit panelboards.
3. Sealed Unit Substation

E 264216.1.3 DEFINITIONS

- A. ATS: Acceptance testing specification.
- B. GFCI: Ground-fault circuit interrupter.
- C. GFEP: Ground-fault equipment protection.
- D. HID: High-intensity discharge.
- E. MCCB: Molded-case circuit breaker.
- F. SPD: Surge protective device.
- G. VPR: Voltage protection rating.

E 264216.1.4 ACTION SUBMITTALS

- A. Product Data: For each type of panelboard.
 1. Include materials, switching and overcurrent protective devices, SPDs, accessories, and components indicated.
 2. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For each panelboard and related equipment.
 1. Submit simultaneously with or after the Overcurrent Protective Device Short-Circuit, Coordination, and Arc-Flash Studies.
 2. Include dimensioned plans, elevations, sections, and details.
 3. Show tabulations of installed devices with nameplates, conductor termination sizes, equipment features, and ratings.
 4. Detail enclosure types including mounting and anchorage, environmental protection, knockouts, corner treatments, covers and doors, gaskets, hinges, and locks.
 5. Detail bus configuration, current, and voltage ratings.
 6. Short-circuit current rating of panelboards and overcurrent protective devices.
 7. Include evidence of NRTL listing for SPD as installed in panelboard.
 8. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
 9. Include wiring diagrams for power, signal, and control wiring.
 10. Key interlock scheme drawing and sequence of operations.
 11. Include time-current coordination curves for each type and rating of overcurrent protective device included in panelboards. Submit on translucent log-log graph paper; include selectable ranges for each type of overcurrent protective device. Include an Internet link for electronic access to downloadable PDF of the coordination curves.

E 264216.1.5 CLOSEOUT SUBMITTALS

Operation and Maintenance Data: For panelboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.

2. Time-current curves, including selectable ranges for each type of overcurrent protective device that allows adjustments.

E 264216.1.6 MAINTENANCE MATERIAL SUBMITTALS

Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Keys: Two spares for each type of panelboard cabinet lock.
2. Circuit Breakers Including GFCI and GFEP Types: Two spares for each panelboard, unless otherwise noted.
3. Fuses for Fused Switches: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.
4. Fuses for Fused Power-Circuit Devices: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.

E 264216.1.7 QUALITY ASSURANCE

Manufacturer Qualifications: ISO 9001 or 9002 certified.

E 264216.1.8 DELIVERY, STORAGE, AND HANDLING

- A. Remove loose packing and flammable materials from inside panelboards; install temporary electric heating (250 W per panelboard) to prevent condensation.
- B. Handle and prepare panelboards for installation according to NEMA PB 1.

E 264216.1.9 FIELD CONDITIONS

- A. Environmental Limitations:
 1. Do not deliver or install panelboards until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above panelboards is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
 2. Rate equipment for continuous operation under the following conditions unless otherwise indicated:
 - a. Ambient Temperature: Not exceeding 23 deg F (minus 5 deg C) to plus 104 deg F (plus 40 deg C).
 - b. Altitude: Not exceeding 6600 feet (2000 m).
- B. Service Conditions: NEMA PB 1, usual service conditions, as follows:
 1. Ambient temperatures within limits specified.
 2. Altitude not exceeding 6600 feet (2000 m).

E 264216.1.10 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace panelboards that fail in materials or workmanship within specified warranty period.
 1. Panelboard Warranty Period: 18 months from date of Substantial Completion.
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace SPD that fails in materials or workmanship within specified warranty period.
 1. SPD Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

E 264216.2.1 PANELBOARDS COMMON REQUIREMENTS

- A. Product Selection for Restricted Space: Drawings indicate maximum dimensions for panelboards including clearances between panelboards and adjacent surfaces and other items. Comply with indicated maximum dimensions.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Comply with NEMA PB 1.
- D. Comply with NFPA 70.

- E. Enclosures: Flush or Surface-mounted, as shown on Drawings, dead-front cabinets.
 - 1. Rated for environmental conditions at installed location.
 - a. Outdoor Locations: NEMA 250, Type 3R.
 - 2. Height: 84 inches (2.13 m) maximum.
 - 3. Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box. Trims must cover all live parts and must have no exposed hardware.
 - 4. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover. Trims must cover all live parts and must have no exposed hardware.
 - 5. Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
 - 6. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
 - 7. Finishes:
 - a. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
 - b. Back Boxes: Galvanized steel.
- F. Phase, Neutral, and Ground Buses:
 - 1. Material and Type: Hard-drawn copper, 98 percent conductivity.
 - a. Plating must run entire length of bus.
 - b. Bus must be fully rated the entire length.
 - c. Sequence type bussing interval connections, bus structure and main lugs or main protective devices with current ratings shown on Drawings.
 - 2. Interiors must be factory assembled into a unit. Replacing switching and protective devices must not disturb adjacent units or require removing the main bus connectors.
 - 3. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
 - 4. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and listed and labeled by an NRTL acceptable to authority having jurisdiction, as suitable for nonlinear loads in electronic-grade panelboards, where so implied by cable sizes, and others designated on Drawings. Connectors must be sized for double-sized or parallel conductors as indicated on Drawings. Do not mount neutral bus in gutter.
 - 5. Indicate on Drawings which panelboards have split buses, including those with contactors that control a portion of the panelboard.
 - 6. Split Bus: Vertical buses divided into individual vertical sections.
- G. Conductor Connectors: Suitable for use with conductor material and sizes.
 - 1. Material: Hard-drawn copper, 98 percent conductivity.
 - 2. Terminations must allow use of 75 deg C rated conductors without derating.
 - 3. Size: Lugs suitable for indicated bus ampacity and conductor sizes shown on Drawings, with additional gutter space, if required, for larger conductors.
 - 4. Main and Neutral Lugs: Mechanical type, with a lug on the neutral bar for each pole in the panelboard.
 - 5. Ground Lugs and Bus-Configured Terminators: Mechanical type, with a lug on the bar for each pole in the panelboard.
 - 6. Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.

- 7. Extra-Capacity Neutral Lugs: Rated 200 percent of phase lugs mounted on extra-capacity neutral bus.
 - H. NRTL Label: Panelboards must be labeled by an NRTL acceptable to authority having jurisdiction for use as service equipment with one or more main service disconnecting and overcurrent protective devices. Panelboards must have meter enclosures, wiring, connections, and other provisions for utility metering. Coordinate with utility company for exact requirements.
 - I. Future Devices: Panelboards must have mounting brackets, bus connections, filler plates, and necessary appurtenances required for future installation of devices. Provide blank covers for all unused device spaces.
 - 1. Percentage of Future Space Capacity: Ten 20 percent, unless indicated otherwise.
 - J. Panelboard Short-Circuit Current Rating: Fully rated unless a greater capacity is required by Overcurrent Protective Device Short-Circuit Study to interrupt symmetrical short-circuit current available at terminals. Series-connected ratings are NOT allowed. Assembly listed by an NRTL for 100 percent interrupting capacity.
 - 1. Panelboards and overcurrent protective devices rated 240 V or less must have short-circuit ratings as shown on Drawings, but not less than 10,000 A rms symmetrical.
 - 2. Panelboards and overcurrent protective devices rated above 240 V and less than 600 V must have short-circuit ratings as shown on Drawings, but not less than 14,000 A rms symmetrical.
 - K. Circuit Breakers: Provide all circuit breakers on project from one manufacturer unless not commercially available.
- E 264216.2.2 PERFORMANCE REQUIREMENTS
- A. Seismic Performance: Panelboards must withstand the effects of earthquake motions determined according to ASCE/SEI 7.
 - 1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."
 - B. Surge Suppression: Factory installed as an integral part of indicated panelboards, complying with UL 1449 SPD Type 2.
- E 264216.2.3 POWER PANELBOARDS
- A. Panelboards: NEMA PB 1, distribution type.
 - B. Doors: Concealed hinges, secured with vault-type latch with tumbler lock; all panelboards keyed alike. Provide two (2) keys with each panelboard. Omit doors for fused-switch panelboards.
 - 1. For doors more than 36 inches (914 mm) high, provide two latches, keyed alike.
 - C. Mains: Circuit breaker, fused switch, or lugs only, as shown on Drawings.
 - D. Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes 125 A and Smaller: Bolt-on circuit breakers.
 - E. Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes Larger Than 125 A: Bolt-on circuit breakers or plug-in circuit breakers where individual positive-locking device requires mechanical release for removal.
 - F. Branch Overcurrent Protective Devices: Fused switches.
 - G. Circuit breaker panelboards equal to I-Line type, and fused switch panelboards equal to QMB type, manufactured by Square D Company.
 - H. Minimum Box Size: 26 inches (655 mm) wide, 6-1/2 inches (165 mm) deep, 600 amp and below; 42 inches (1060 mm) wide, 9-1/2 inches (240 mm) deep above 600 amps.
 - I. Provide load identification at each device per Section 260553 - "Identification for Electrical Systems."

E 264216.2.4 LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS

- A. Panelboards: NEMA PB 1, lighting and appliance branch-circuit type.
- B. Mains: Circuit breaker or lugs only, as shown on Drawings.
- C. Branch Overcurrent Protective Devices: Plug-in Bolt-on circuit breakers, replaceable without disturbing adjacent units.
- D. Doors: Concealed hinges; secured with flush latch with tumbler lock; keyed alike. Provide two (2) keys with each panelboard.
- E. Doors: Door-in-door construction with concealed hinges; secured with multipoint latch with tumbler lock; all panelboards keyed alike. Provide two (2) keys with each panelboard. Outer door must permit full access to the panel interior. Inner door must permit access to breaker operating handles and labeling, but current carrying terminals and bus must remain concealed.
- F. Short circuit current ratings as shown on Drawings, but not less than 10,000 RMS symmetrical amperes for panelboards rated 240 V or less, and 14,000 RMS symmetrical amperes for panelboards rated above 240 V and less than or equal to 600 V.
- G. Equal to NQ and NF type manufactured by Square D Company.
- H. Standard Box Size: 5-3/4 inches (145 mm) deep, 20 inches (500 mm) wide.

E 264216.2.5 SEALED UNIT SUBSTATION

- A. Requirements in this article are in addition to those described elsewhere in this Section.
- B. Panelboards: NEMA PB 1; lighting and appliance branch-circuit type with copper wound sealed transformer. Transformer size and number of circuit breakers indicated on the drawings. Doors: Secured with lock.
- C. Main Overcurrent Protective Devices: Bolt-on thermal-magnetic circuit breaker.
- D. Secondary Overcurrent Protective Device: Bolt-on thermal magnetic circuit breaker.
- E. Branch Overcurrent Protective Devices: Bolt-on thermal-magnetic circuit breakers.

E 264216.2.6 DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES

- A. MCCB: Comply with UL 489, with interrupting capacity to meet available fault currents or as shown on Drawings, whichever is higher.
 - 1. Thermal-Magnetic Circuit Breakers:
 - a. Inverse time-current element for low-level overloads.
 - b. Instantaneous magnetic trip element for short circuits.
 - c. Common simultaneous trip for 2 and 3 pole breakers.
 - 2. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.
 - 3. Current-Limiting Circuit Breakers: Frame sizes 400 A and smaller; let-through ratings less than NEMA FU 1, RK-5.
 - 4. GFCI Circuit Breakers: Single- and double-pole configurations with Class A ground-fault protection (6-mA trip).
 - 5. GFEP Circuit Breakers: Class B ground-fault protection (30-mA trip).
 - 6. Arc-Fault Circuit Interrupter Circuit Breakers: Comply with UL 1699; 120/240-V, single-pole configuration.
 - 7. MCCB Features and Accessories:
 - a. Standard frame sizes, trip ratings, and number of poles.
 - b. Individually insulated, braced and protected connectors.
 - c. Breaker handle indicates tripped status.
 - d. UL listed for reverse connection without restrictive line or load ratings.
 - e. Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor materials.

- f. Ground-Fault Protection: Integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
- g. Shunt Trip: 120-V trip coil energized from separate circuit, set to trip at 75 percent of rated voltage.
- h. Handle Padlocking Device: Fixed attachment, for locking circuit-breaker handle in on or off position.
- i. Handle Clamp: Loose attachment, for holding circuit-breaker handle in on position.

E 264216.2.7 IDENTIFICATION

- A. Panelboard Label: Manufacturer's name and trademark, voltage, amperage, number of phases, and number of poles must be located on the interior of the panelboard door.
- B. Breaker Labels: Faceplate must list current rating, UL and IEC certification standards, and AIC rating.
- C. Circuit Directory: Directory card inside panelboard door, mounted in transparent card holder or metal frame with transparent protective cover.
 - 1. Circuit directory must identify specific purpose with detail sufficient to distinguish it from all other circuits.

E 264216.2.8 MANUFACTURERS

Manufacturers for power panelboards, lighting and appliance branch-circuit panelboards, sealed unit substation, and disconnecting and overcurrent protecting devices: Subject to compliance with requirements, provide products by one of the following:

1. Eaton. <https://www.eaton.com/> +1(800) 498-2678.
2. ESL Power Systems, Inc. 2800 Palisades Drive, Corona, CA 92878. <https://eslpwr.com/> (800) 922-4188.
3. ABB; Electrical Distribution & Control Division. <https://new.abb.com/> +1(800) 435 7365.
4. SIEMENS; Energy Management Division. 300 New Jersey Avenue Suite 1000, Washington D.C. 20001. <https://www.siemens.com/> +1(800) 743-6367.
5. Square D; by Schneider Electric. <https://www.se.com/us/en/brands/squared/> (888) 778-2733.

E 264216.2.9 ACCESSORY COMPONENTS AND FEATURES

- A. Accessory Set: Include tools and miscellaneous items required for overcurrent protective device test, inspection, maintenance, and operation.
- B. Portable Test Set: For testing functions of solid-state trip devices without removing from panelboard. Include relay and meter test plugs suitable for testing panelboard meters and switchboard class relays.

PART 3 - EXECUTION

E 264216.3.1 EXAMINATION

- A. Verify actual conditions with field measurements prior to ordering panelboards to verify that equipment fits in allocated space in, and comply with, minimum required clearances specified in NFPA 70.
- B. Receive, inspect, handle, and store panelboards according to NEMA PB 1.1.
- C. Examine panelboards before installation. Reject panelboards that are damaged, rusted, or have been subjected to water saturation.
- D. Examine elements and surfaces to receive panelboards for compliance with installation tolerances and other conditions affecting performance of the Work.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

E 264216.3.2 INSTALLATION

- A. Coordinate layout and installation of panelboards and components with other construction that penetrates walls or is supported by them, including electrical and other types of equipment, raceways, piping, encumbrances to workspace clearance requirements, and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.
- B. Comply with NECA 1.
- C. Install panelboards and accessories according to NEMA PB 1.1.
- D. Equipment Mounting:
 - 1. Install panelboards less than 60 inches in height on an equipment rack.
- E. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from panelboards.
- F. Mount panelboards such that top of switch or breaker handle is located 6'-6" or less above finished floor unless otherwise indicated.
- G. Mount panelboard cabinet plumb and rigid without distortion of box.
- H. Mount surface-mounted panelboards in wet or damp locations, to steel slotted supports 1 1/4 inch (32 mm) in depth. Orient steel slotted supports vertically.
- I. Mechanically bolt panelboards of more than one (1) section together.
- J. Install overcurrent protective devices and controllers not already factory installed.
 - 1. Set field-adjustable, circuit-breaker trip ranges.
 - 2. Tighten bolted connections and circuit breaker connections using calibrated torque wrench or torque screwdriver per manufacturer's written instructions.
- K. Make grounding connections and bond neutral for services and separately derived systems to ground. Make connections to grounding electrodes, separate grounds for isolated ground bars, and connections to separate ground bars.
- L. Install filler plates in unused spaces.
- M. Stub four 1-inch (25 mm) empty conduits from panelboard into accessible ceiling space or space designated to be ceiling space in the future. Stub four 1-inch (25 mm) empty conduits into raised floor space or below slab not on grade.
- N. Arrange conductors in gutters into groups and bundle and wrap with wire ties after completing load balancing.
- O. Provide breaker locking devices as required by other sections of Division 26 and 28.

E 264216.3.3 IDENTIFICATION

- A. Conductors: Identify field-installed conductors, interconnecting wiring, and components; complying with requirements in Section 260553 "Identification for Electrical Systems."
- B. Branch-Circuit Panelboard Directories: Create a directory to indicate installed circuit loads after balancing panelboard loads; incorporate Owner's final room designations and equipment being served. Use identifications compatible with Owner's program and readily identifiable without removing directory from its holder. Obtain Owner's approval before installing. Handwritten directories are not acceptable. Install directory inside panelboard door.
- C. Panelboard Nameplates: Label each panelboard with a nameplate complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems."
- D. Device Nameplates: Label each branch circuit device in power panelboards with a nameplate complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems."
- E. Install warning signs complying with requirements in Section 260553 "Identification for Electrical Systems" identifying source of remote circuit.

E 264216.3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- B. Perform tests and inspections
- C. Acceptance Testing Preparation:
 - 1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
 - 2. Test continuity of each circuit.
- D. Tests and Inspections:
 - 1. Perform each visual and mechanical inspection and electrical test for low-voltage surge arrestors stated in NETA ATS, Paragraph 7.19.1 Surge Arrestors, Low-Voltage. Do not perform optional tests. Certify compliance with test parameters.
 - 2. Verify nameplate data and overcurrent protective device sizes and types match drawing and specification requirements.
 - 3. Inspect physical and mechanical condition of equipment.
 - 4. Verify required anchoring of equipment to floor and wall.
 - 5. Verify all bolted connections meet manufacturer's recommended tightness.
 - 6. Test ground-fault protection of equipment per NFPA 70.
 - 7. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
 - 8. Perform the following infrared scan tests and inspections and prepare reports:
 - a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each panelboard. Remove front panels so joints and connections are accessible to portable scanner.
 - b. Instruments and Equipment:
 - 1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
- E. Panelboards will be considered defective if they do not pass tests and inspections.
- F. Prepare test and inspection reports, including a certified report that identifies panelboards included and that describes scanning results, with comparisons of the two scans. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

E 264216.3.5 ADJUSTING

- A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.
- B. Set field-adjustable circuit-breaker trip ranges.
- C. Load Balancing: After Substantial Completion, but not more than 60 days after Final Acceptance, measure load balancing and make circuit changes. Prior to making circuit changes to achieve load balancing, inform Architect of effect on phase color coding.
 - 1. Measure loads during period of normal facility operations.
 - 2. Perform circuit changes to achieve load balancing outside normal facility operation schedule or at times directed by the Architect. Avoid disrupting services such as fax machines and on-line data processing, computing, transmitting, and receiving equipment.
 - 3. After changing circuits to achieve load balancing, recheck loads during normal facility operations. Record load readings before and after changing circuits to achieve load balancing.

4. Tolerance: Maximum difference between phase loads, within a panelboard, must not exceed 20 percent.
5. Re-label affected equipment, devices, junction boxes, wiring, panelboard directories, etc. due to load reconnection and branch circuit number changes.

E 264216.3.6 PROTECTION

Temporary Heating: Prior to energizing panelboards, apply temporary heat to maintain temperature according to manufacturer's written instructions.

E 264216.3.7 CLEANING

On completion of installation, inspect interior and exterior of panelboards. Remove paint splatters and other spots. Vacuum dirt and debris; do not use compressed air to assist in cleaning. Repair exposed surfaces to match original finish.

E 264216.3.8 DEMONSTRATION

Train Owner's maintenance personnel to adjust, operate, and maintain panelboards, overcurrent protective devices, and accessories, and to use and reprogram microprocessor-based trip, monitoring, and communication units.

PART 4 - BASIS OF PAYMENT

E 264216.4.1 MEASUREMENT

The unit measurement of EACH for the pay items SEALED UNIT SUBSTATION and PANELBOARDS will include all panels or sealed unit substations, breakers, covers, seals, plugs, and other required appurtenances for a complete and functional installation.

E 264216.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

1. Sealed Unit Substation with Six (6) 20A single-pole breakers, Four (4) 15A single-pole breakers, and One (1) 30A double-pole breaker mounted in the secondary load-center.
2. Panelboard with One (1) 100A triple-pole breaker, Five (5) 30A triple-pole breakers, and Three (3) 20A double-pole breakers installed.

Payment will be made under:

Item No.	Description	Pay Unit
E 262416 E	SEALED UNIT SUBSTATION	EACH
E 262416 F	PANELBOARDS, (1) 100A 3P, (5) 30A 3P, (3) 20A 2P	EACH

END OF SECTION E 264216

SECTION E 263600 – MANUAL TRANSFER SWITCHES**PART 1- GENERAL****E 263600.1.1 RELATED DOCUMENTS**

Drawings and general provisions of the Contract apply to this Section.

E 263600.1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for transfer switches.
 - 2. Include rated capacities, operating characteristics, electrical characteristics, and accessories.
- B. Shop Drawings:
 - 1. Include plans, elevations, sections, details showing minimum clearances, conductor entry provisions, gutter space, and installed features and devices.
 - 2. Include material lists for each switch specified.
 - 3. Single-Line Diagram: Show connections between transfer switch, bypass/isolation switch, power sources, and load; and show interlocking provisions for each combined transfer switch and bypass/isolation switch.
 - 4. Riser Diagram: Show interconnection wiring between transfer switches, bypass/isolation switches, annunciators, and control panels.

E 263600.1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer-authorized service representative.
- B. Field quality-control reports.

E 263600.1.4 CLOSEOUT SUBMITTALS

Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals.

- 1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:
 - a. Features and operating sequences, both automatic and manual.
 - b. List of all factory settings of relays; provide relay-setting and calibration instructions, including software, where applicable.

E 263600.1.5 QUALITY ASSURANCE

Testing Agency Qualifications:

- 1. Member Company of NETA.
 - a. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

E 263600.1.6 WARRANTY

Manufacturer's Warranty: Manufacturer agrees to repair or replace components of transfer switch or transfer switch components that fail in materials or workmanship within specified warranty period.

- 1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS**E 263600.2.1 PERFORMANCE REQUIREMENTS**

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with NEMA ICS 1.
- C. Comply with NFPA 99.
- D. Comply with NFPA 110.
- E. Comply with UL 1008 unless requirements of these Specifications are stricter.

- F. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer, including tungsten filament lamp loads not exceeding 30 percent of switch ampere rating, unless otherwise indicated.
 - G. Tested Fault-Current Closing and Short-Circuit Ratings: Adequate for duty imposed by protective devices at installation locations in Project under the fault conditions indicated, based on testing according to UL 1008.
 - 1. Where transfer switch includes internal fault-current protection, rating of switch and trip unit combination must exceed indicated fault-current value at installation location.
 - 2. Short-time withstand capability for 30 cycles. 3-cycle or other than 30-cycle short-term withstand capability ATSS are accepted only if verified and validated to be adequate.
 - H. Resistance to Damage by Voltage Transients: Components must meet or exceed voltage-surge withstand capability requirements when tested according to IEEE C62.62. Components must meet or exceed voltage-impulse withstand test of NEMA ICS 1.
 - I. Neutral Switching: Where four-pole switches are indicated, provide neutral pole switched simultaneously with phase poles.
 - J. Neutral Terminal: Solid and fully rated unless otherwise indicated.
 - K. Enclosures: NEMA 4X, complying with NEMA ICS 6 and UL 508, unless otherwise indicated.
- E 263600.2.2 QUALITY CONTROL
- A. Factory Tests: Test and inspect components, assembled switches, and associated equipment according to UL 1008. Ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements. Perform dielectric strength test complying with NEMA ICS 1.
 - B. Prepare test and inspection reports.
 - 1. For each of the tests required by UL 1008, performed on representative devices, for emergency and legally required systems. Include results of test for the following conditions:
 - a. Overvoltage.
 - b. Undervoltage.
 - c. Loss of supply voltage.
 - d. Reduction of supply voltage.
 - e. Alternative supply voltage or frequency is at minimum acceptable values.
 - f. Temperature rise.
 - g. Dielectric voltage-withstand; before and after short-circuit test.
 - h. Overload.
 - i. Contact opening.
 - j. Endurance.
 - k. Short circuit.
 - l. Short-time current capability.
 - m. Receptacle withstand capability.
 - n. Insulating base and supports damage.

PART 3 - EXECUTION

E 263600.3.1 INSTALLATION

- A. Identify components according to Section 260553 "Identification for Electrical Systems."
- B. Comply with NECA 1.

E 263600.3.2 CONNECTIONS

- A. Wiring Method: Install cables in raceways and cable trays except within electrical enclosures. Conceal raceway and cables except in unfinished spaces.
 - 1. Comply with requirements for raceways and boxes specified in Section 260533 "Raceways and Boxes for Electrical Systems."

- B. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.
 - C. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."
 - D. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables"
 - E. Route and brace conductors according to manufacturer's written instructions and Section 260529 "Hangers and Supports for Electrical Systems." Do not obscure manufacturer's markings and labels.
 - F. Final connections to equipment must be made with liquid-tight, flexible metallic conduit no more than 18 inches (457 mm) in length.
- E 263600.3.3 FIELD QUALITY CONTROL
- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 1. After installing equipment, test for compliance with requirements according to NETA MTS.
 2. Visual and Mechanical Inspection:
 - a. Compare equipment nameplate data with Drawings and Specifications.
 - b. Inspect physical and mechanical condition.
 - c. Inspect anchorage, alignment, grounding, and required clearances.
 - d. Verify that the unit is clean.
 - e. Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
 - f. Verify that manual transfer warnings are attached and visible.
 - g. Verify tightness of all control connections.
 - h. Inspect bolted electrical connections for high resistance using one of the following methods, or both:
 - 1) Use of low-resistance ohmmeter.
 - 2) Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method according to manufacturer's published data. Mark connections have been torqued.
 - i. Perform manual transfer operation.
 - j. Verify positive mechanical interlocking between normal and alternate sources.
 - k. Mark inside enclosure building phase rotation.
 - l. Inspect control power transformers.
 - 1) Inspect for physical damage, cracked insulation, broken leads, and tightness of connections, defective wiring, and overall general condition.
 - 2) Verify that primary and secondary fuse or circuit-breaker ratings match Drawings.
 - 3) Verify correct functioning of draw-out disconnecting contacts, grounding contacts, and interlocks.
 3. Electrical Tests:
 - a. Perform insulation-resistance tests on all control wiring with respect to ground.
 - b. Perform a contact/pole-resistance test. Compare measured values with manufacturer's acceptable values.
 - c. Verify settings and operation of control devices.
 - d. Verify phase rotation, phasing, and synchronized operation.
 - e. Perform automatic transfer tests.
 4. Measure insulation resistance phase-to-phase and phase-to-ground with insulation-resistance tester. Include external annunciation and control circuits. Use

test voltages and procedure recommended by manufacturer. Comply with manufacturer's specified minimum resistance.

- a. Check for electrical continuity of circuits and for short circuits.
 - b. Inspect for physical damage, proper installation and connection, and integrity of barriers, covers, and safety features.
 - c. Verify that manual transfer warnings are properly placed.
 - d. Perform manual transfer operation.
- B. Report results of tests and inspections in writing. Record measured insulation and contact resistances. Attach a label or tag to each tested component indicating satisfactory completion of tests.
 - C. Transfer switches will be considered defective if they do not pass tests and inspections.
 - D. Remove and replace malfunctioning units and retest as specified above.
 - E. Prepare test and inspection reports.
 - F. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each switch. Remove all access panels so joints and connections are accessible to portable scanner.
 - 1. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - 2. Record of Infrared Scanning: Prepare a certified report that identifies switches checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken and observations after remedial action.
 - 3. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each switch 11 months after date of Substantial Completion.

E 263600.3.4 DEMONSTRATION

Train Owner's maintenance personnel to adjust, operate, and maintain transfer switches and related equipment.

PART 4 - MEASUREMENT AND PAYMENT

E 263600.4.1 MEASUREMENT

The measurement includes, but is not limited to, the procurement, shipping, and installation of EACH Manual Transfer Switch

E 263600.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

- 1. Installation of Manual Transfer Switch
- 2. Field-Installed identification
- 3. Conductor termination
- 4. Field quality testing and inspection.

Payment will be made under:

Item No.	Description	Pay Unit
E 263600	MANUAL TRANSFER SWITCHES	EACH

END OF SECTION E 263600

SECTION E 264160 - GENERATOR RECEPTACLE**PART 1 - GENERAL****E 264160.1.1 SUMMARY:**

Section Includes:

1. Outlet Receptacle for Generator Connection.

E 264160.1.2 Design Standards:

UL Standard 1682 and UL 50E

PART 2 - PRODUCTS**E 264160.2.1 MANUFACTURERS**

- A. Appleton. <https://www.appleton.emerson.com/en-us>
- B. Thomas & Betts. 860 Ridge Lake Boulevard, Memphis, TN 38120. <https://electrification.us.abb.com/products/installation-products> (901) 252-5000.
- C. Hubbell. 40 Waterview Dr, Shelton, CT 06484. <https://www.hubbell.com/>

E 264160.2.2 RECEPTACLE REQUIREMENTS:

- A. NEMA Ratings: 3, 3R, 4, 4X
- B. Must be suitable for outdoor, wet locations.
- C. Receptacle shall be pin-and-sleeve type.
- D. Voltage: As indicated on the Project Drawings
- E. Ampacity: As indicated on the Project Drawings.
- F. Housing:
 1. Aluminum, epoxy powder-coat finish.
 2. Must include plug cap with locking provisions.
- G. Pins:
 1. Include number of poles as indicated on the drawings.
 2. Pin arrangement shall be polarized such that mating plug may only be inserted in correct orientation.
 3. Energized pins shall be recessed to prevent accidental contact.
- H. Grounding:
 1. Receptacle ground pin must be included. Receptacle shell grounding is not acceptable.
 2. Ground pin shall be longer than phase pins as to connect first and disconnect last.
- I. Receptacle must operate in the following ambient conditions.
 1. -25 Degrees C to +40 Degrees C (-13 Degrees Fahrenheit to 104 Degrees Fahrenheit)
 2. Elevation: less than 1000 feet above average sea level.
- J. Shall be capable of withdrawing plug during emergency situations under full rated loads without separate disconnect switches.

PART 3 - EXECUTION**E 264160.3.1 INSTALLATION:**

- A. Install and wire in accordance with manufacturer's written instructions and approved submittals.
- B. The following shall be provided to the Owner prior to Substantial Completion:
 1. Mating plug.
 2. List of replacement parts including exact part numbers.

PART 4 – MEASUREMENT AND PAYMENT**E 264160.4.1 MEASUREMENT**

The measurement includes, but is not limited to, the procurement, shipping, insurance, and installation of EACH Generator Receptacle and the Mating Plug for Generator Receptacle

E 264160.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work according to these specifications. The price bid will include, but not be limited to, the following:

1. Generator Receptacle installation
2. Conductor termination

Payment will be made under:

Item No.	Description	Pay Unit
E 264160	GENERATOR RECEPTACLE AND MATING PLUG PAIR	EACH

END OF SECTION E 264160

SECTION 409543 PROGRAMMABLE LOGIC CONTROLLER (PLC) AND PANEL DEVICES**PART 1 - GENERAL****E 409543.1.1 SUMMARY:**

- A. Section Includes:
 - 1. PLC hardware and programming software.

E 409543.1.2 SYSTEM DESCRIPTION:

- A. Small PLC Design Standards:
 - 1. Class 1, Div 2, Groups A, B, C, D (UL 1604, C-UL under CSA C22.2 No. 213).
 - 2. UL 508 and C-UL under CSA C22.2 No. 142 for Dielectric Withstand.
- B. Medium PLC Design Standards:
 - 1. UL 508 and CSA C22.2 No. 142 for Dielectric Withstand.
 - 2. NEMA Standard ICS -230 for Noise Immunity and Showering Arc Levels.
 - 3. IEEE Std. 472 - 1974/ANSI C37.90/90A-1974 for Surge Withstand Capability.
- C. Large PLC Design Standards:
 - 1. UL 508 and CSA Standard C22.2 No. 142 for Isolation Voltages.
 - 2. IEC 60068-2.1, 2.2, 2.3, 2.6, and 2.27.
 - 3. IEC 61000-4.2, 4.3, 4.4, 4.5, and 4.6.
 - 4. ASTM D999-91.
 - 5. NSTA Project 1A.
 - 6. CISPR 11 (EN 55011).
 - 7. IEEE Std. 472-1974/ANSI C37.90-1974.

PART 2 – PRODUCTS**E 409543.2.1 COMMON DESIGN REQUIREMENTS:**

- A. Total minimum I/O interface capability as specified and shown on Drawings.
- B. Expandable.
- C. Modular.
- D. Accept digital and analog input signals.
- E. Control digital and analog output signals.
- F. Monitor signal status of input and output devices.
- G. Mounting hardware and interconnecting cables.
- H. Include status and fault monitoring.
- I. Include e-mail notifications. E-mail notifications shall be coordinated and confirmed by the city.

E 409543.2.2 COMMON PROCESSOR WITH MEMORY REQUIREMENTS:

- A. Internal diagnostics shall be available to user for troubleshooting.
- B. Halt if any of following occur:
 - 1. Memory error.
 - 2. Communications error between CPU and I/O modules.
 - 3. Detection of application error.
- C. Battery backup to prevent program loss on power failure.
- D. Features/Functions:
 - 1. Contact/coil status.
 - 2. Latching/unlatch.
 - 3. Force I/O.
 - 4. Data transfer.
 - 5. Four function math.
 - 6. Counting.
 - 7. Timing.
 - 8. Self-monitoring diagnostics.

9. Shift registers.
 10. Transitional coils.
 11. Master control relay.
 12. Subroutines.
 13. Matrix operations.
 14. Data comparisons.
 15. Internal diagnostics available to user.
 16. PID control.
 17. Network capabilities.
- E 409543.2.3 COMMON POWER SUPPLY REQUIREMENTS:
- A. 120 vac, 60 Hz power input.
 - B. Fused input.
 - C. 0.2% load regulation.
 - D. Sized for minimum of 125% of load.
- E 409543.2.4 COMMON PROGRAMMING SOFTWARE REQUIREMENTS:
- A. Manufacturer's software compatible with programmable logic controllers and PC hardware and software specified.
 - B. PLC Programming Software shall provide capability to:
 1. Program PLC features/functions off-line.
 2. Display on-line status of I/O and registers.
 3. Symbols similar to conventional relay logic symbols.
 4. Search function.
 5. Edit program.
 6. Display error code registers.
 7. Connect programming PC to PLC through network.
 8. Security via user-defined password.
 9. Printout program.
 10. Programming annotation.
 11. Load and record contents of memory.
- E 409543.2.5 PLCS:
- A. Manufacturers:
 1. Allen Bradley. <https://www.rockwellautomation.com/en-us/products/hardware/allen-bradley.html> (440) 646-3434.
 2. Schneider Electric. <https://www.se.com/> (888) 778-2733.
 3. ABB. <https://new.abb.com/> +1(800) 435 7365.
 4. Honeywell. <https://www.honeywell.com/>
 - B. Additional Design Requirements
 1. Capable of:
 - a. Operating in temperatures of 0°C to 60°C.
 - b. Operating in humidity of 5% to 95%, non-condensing.
 - C. Chassis:
 1. Modular.
 2. Integral or remote power supply.
 3. Capability to accept:
 - a. Processor with memory.
 - b. I/O modules.
 - c. Communications hardware.
 - D. Additional Processor With Memory Requirements:
 1. Size memory with reserve capacity of 30%.
 2. Additional Features/Functions:
 - a. Clock and Date.
 - E. Additional Power Supply Requirements:
 1. Short circuit current limit protection

2. Crowbar over-voltage protection.
 - F. I/O Modules: Use Compact Logix modules over Ethernet.
 1. General:
 - a. Shield against electrical noise and RF.
 - b. Provide optical isolation to give 1,500 vdc isolation from wiring on other I/O modules.
 - c. Provide I/O wiring screw terminals:
 - 1) I/O wiring screw terminals shall be removable so as not to disturb user wiring when replacing defective module.
 2. Analog Input Modules:
 - a. Accept 1-5 vdc or 4-20 mAdc analog signals.
 - b. 16 bit converter:
 - 1) Current Resolution: 1 microamp per bit.
 - 2) Voltage Resolution: 1 microvolt per bit.
 - c. Accuracy:
 - 1) Current: $\pm 0.05\%$.
 - 2) Voltage: $\pm 0.10\%$.
 - d. Point to point isolation.
 3. Analog Output Modules:
 - a. Output 1-5 vdc or 4-20 mAdc analog signals.
 - b. 14 bit converter:
 - 1) Current Resolution: 2.56 microamp dc per least significant bit.
 - 2) Voltage Resolution: 1.22 mVdc per least significant bit.
 - c. Point to point isolation.
 - d. Over-voltage protection.
 - e. Short circuit protection.
 4. Discrete Input Modules:
 - a. Monitor contact openings and closures from panel and field devices.
 - b. Individually isolated 120 vac type.
 - c. LED lights for each input to indicate status.
 5. Discrete Output Modules:
 - a. Provide contact openings and closures to panel and field devices.
 - b. Each output to have indicator light to show output status.
 - c. Individually isolated.
 - d. Rating: 0.55 amp at 120 vac, inductive.
 - G. Additional Programming Software Requirements:
 1. Program PLC functions on-line and off-line.
- E 409543.2.6 Telecommunications interface:
- A. Provide Ethernet secured according to DDC standards.
 - B. Conform with NYC Information Technology & Telecommunications DoITT Cybersecurity Requirements for Vendors & Contractors.
- E 409543.2.7 CABLES:
- A. Interconnecting cables.
 - B. Serial cable to connect programming PC to PLC's.
- E 409543.2.8 COMMUNICATIONS HARDWARE:
- A. Provide communication protocols as specified.
 - B. Provide 500 vdc isolation between communication circuits.
- E 409543.2.9 SOURCE QUALITY CONTROL:
- UL, CUL, and CSA approved. CE compliant for all applicable directives.
- E 409543.2.10 panel devices
- A. Manufacturers:
 1. Square D. <https://www.se.com/us/en/brands/squared/> (888) 778-2733.
 2. Eaton. <https://www.eaton.com/> +1(800) 498-2678.

3. Allen Bradley. <https://www.rockwellautomation.com/en-us/products/hardware/allen-bradley.html> +1(440) 646-3434.
- B. Construction:
1. Heavy duty.
 2. Oil tight, watertight.
 3. Base mounting.
 4. Flush panel mounting.
 5. Size to mount in 30.5 mm opening without adapter. Smaller units are not acceptable.
- C. Pushbuttons:
1. Flush head unless specified elsewhere.
 2. Contact Blocks:
 - b. Double break silver contacts.
 - c. ac Ratings: 7,200 va make, 720 va break.
 - d. Single pole, double throw or double pole, single throw.
 - e. Up to 6 tandem blocks.
 3. Momentary contact unless specified elsewhere.
 4. Non-illuminated.
 5. Padlock attachments where required.
 6. Legend plates as required for type of operation or as specified elsewhere.
- D. Selector Switches:
1. Maintained position unless specified elsewhere.
 2. Contact Blocks:
 - a. Double break silver contacts.
 - b. ac Ratings: 7,200 va make, 720 va break.
 - c. Single pole, double throw or double pole, single throw.
 - d. Up to 6 tandem blocks.
- E. Operators:
1. Number of positions as specified elsewhere.
 2. Standard knob type unless specified elsewhere
 3. Legend plates as required for type of operation or specified elsewhere.
- F. Pilot Lights:
1. Transformer type.
 2. LED bulb.
 3. Colored lenses as specified elsewhere.
 4. Interchangeable lenses.
 5. Transformer rated for 120 v, 60 Hz.
 6. Push to test.
 7. Legend plates as required for type of operation or specified elsewhere.
- G. Nameplates:
1. Control Stations:
 - a. Engraved laminated plastic.
 - b. Letters 3/16 in. high.
 - c. Black letters on white background.
 - d. Identify per equipment controlled.
- E 409543.2.11 general purpose control relays:
- A. Manufacturers:
1. Potter and Brumfield/TE Connectivity, KU Series. <https://www.te.com/> (800) 522 6752.
 2. Struthers Dunn. 407 East Smith Street, Suite B, Timmons ville, SC 29161. <https://www.struthers-dunn.com/> (843) 346-4427.
 3. Or equal.

- B. Operating Data:
 - 1. Pickup Time: 13 ms maximum.
 - 2. Dropout Time: 10 ms maximum.
 - 3. Operating Temperature: -45°C to 70°C.
 - C. AC Coil:
 - 1. 120 or 240 vac.
 - 2. Continuous rated.
 - 3. 3.5 va inrush.
 - 4. 1.2 va sealed.
 - 5. 50 to 60 Hz.
 - 6. Minimum Dropout Voltage: 10% of coil rated voltage.
 - D. DC Coil:
 - 1. 24 or 120 vdc.
 - 2. Continuous rated.
 - 3. Minimum Coil Resistance: 24vdc – 450 ohm, 100vdc – 9,000 ohm.
 - E. Contacts:
 - 1. Silver cadmium oxide.
 - 2. Gold flashed fine silver, gold diffused for 1 amp or less resistive loads.
 - 3. 4 Form C.
 - 4. 120 vac.
 - 5. 10 amp make, 15 amp break, (inductive).
 - F. Rated at 10 million operations.
 - G. Plug-in sockets.
 - H. Enclosed and protected by polycarbonate cover.
 - I. Provide relay retaining clips.
- E 409543.2.12 TERMINAL BLOCKS FOR CONTROL WIRING
- A. Manufacturers:
 - 1. Phoenix Contact. UK-5N.586 Fulling Mill Road, Middletown, PA 17057 <https://www.phoenixcontact.com/en-us/> (800) 888-7388.
 - 2. Allen Bradley, Bulletin 1492. <https://www.rockwellautomation.com/en-us/products/hardware/allen-bradley.html> +1(440) 646-3434.
 - B. General:
 - 1. 600 v rating.
 - 2. Marker labels on each terminal.
 - 3. Clip-mount on DIN rails.
 - 4. Insulating end caps to support each terminal block assembly.
 - 5. Touchsafe terminal block and accessories.
 - 6. Connection: Captive screw and pressure plate. Connection shall not cause deformation of wire.
 - 7. Contact material and surface: Nickel or tin plated copper alloy. Do not use ferrous metals.
 - C. Switched Knife Disconnect (when specified):
 - 1. Non-fused.
 - 2. Single-pull, single throw (SPST).
 - 3. Hinged disconnect lever.
 - D. Fused Indicating (when specified):
 - 1. LED blown fuse indicating light.
 - 2. Hinged disconnect lever.
 - 3. Size fuse for load.
 - 4. 15 amp capacity fuse holder.
- E 409543.2.13 TAGGING
- A. Provide Type 316 stainless steel tag on field-mounted units and permanently affix tag to unit.

- B. Engrave with process application as listed in Specifications.
- C. Include ENGINEER'S tag number as listed in Specifications and on P&ID's.

PART 3 - EXECUTION

E 409543.3.1 INSTALLATION:

- A. Install and wire in accordance with manufacturer's written instructions and approved submittals.
- B. Control Relays:
 - 1. Provide control relays for general purpose logic circuits.

PART 4 – MEASUREMENT AND PAYMENT

E 409543.4.1 MEASUREMENT

The unit of measurement for IO CARDS will be EACH IO card furnished and installed. PROGRAMMABLE LOGIC CONTROLLER will be measured per EACH Programmable logic controller furnished and installed with its associated racks and appurtenances. The lump sum measurement of the PANEL DEVICES pay item includes solid-state microprocessors, power supplies, control relays, pilot devices, terminals, fuses, fuse holders, terminal anchors, mounting rails, control wiring, power wiring, telecommunications wiring, metallic enclosure, metallic enclosure back-panel, annunciating devices, programming, trouble shooting, and all other required appearances for a complete and functioning control cabinet.

E 409543.4.2 PRICE TO COVER

The unit price bid will include the cost of furnishing all labor, materials, insurance, and equipment necessary to satisfactorily complete the work in accordance with these specifications. The price bid will include, but not be limited to, the following:

1. Programmable Logic Controller Installation
2. IO Card installation
3. Conductor identification
4. Installation of all required Panel Devices
5. Programmable Logic Controller Programming

Payment will be made under:

Item No.	Description	Pay Unit
E 409543 A	PROGRAMMABLE LOGIC CONTROLLER	EACH
E 409543 B	IO CARDS	EACH
E 409543 C	PANEL DEVICES	LUMP SUM

END OF SECTION E 409543

JB-PAGES (4.0)

JOINT BID

NOTICE

THE PAGES CONTAINED IN THIS JOINT BID (JB-PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY FACILITIES.

(NO TEXT ON THIS PAGE)

JB-PAGES TABLE OF CONTENTS

- SECTION A. JOINT BID CONTRACT REQUIREMENTS AND STANDARD SPECIFICATIONS**
- SECTION B. NYCDDC INFRASTRUCTURE DIVISION JOINT BID UTILITY PRICE LIST**
- SECTION C. JOINT BID SPECIAL SPECIFICATIONS**
- SECTION D. PRIVATE UTILITIES PARTICIPATING LIST**
- SECTION E. PRIVATE UTILITIES SCOPE OF WORK**
- SECTION F. PRIVATE UTILITIES TEST PITS AND SKETCHES**
- SECTION G. PRIVATE UTILITY DRAWING LIST**

**SECTION A. JOINT BID CONTRACT
REQUIREMENTS AND STANDARD
SPECIFICATIONS**

SECTION A.1 - Requirements for Joint Bid Work

A. Definitions. Additional terms are defined in Standard Construction Contract.

1. "Business Days" will mean Monday through Friday, excluding holidays.
2. "City Facility(ies)" will mean any facility owned by the City, including, but not limited to, roadways, streets, highways, parkways and other thoroughfares, bridges, sewers, culverts, catch basins, chutes and water mains.
3. "Joint Bid Project(s)" will mean a construction project that the City and Utilities agree will be awarded in accordance with applicable law and will include both City Facilities and Utility Facilities.
4. "Pre-engineer" or "Pre-engineering" will mean a process undertaken by the Utilities on all Joint Bid Projects whereby the Utilities will determine and mark-out current Utility Facilities, and design the location and/or re-location of Utility Facilities in a manner that is to the extent practicable, efficient and cost-effective for both the City and the Utilities to avoid or ameliorate disturbances to the City Facilities and the Utilities Facilities, and in which the City and Utility participate in prior to the award of a Joint Bid Project contract.
5. "Public Work" will mean the following: (a) construction, reconstruction, installation, alteration, maintenance, repair, grading, re-grading, regulating and improvement of roadways, highways, streets, parkways and other thoroughfares, and bridges and (b) similarly for sewers, culverts, catch basins, chutes and water mains.
6. "Shared Items" will mean the bid items in the City's construction contract in which the total cost will be paid for by the City and the Utilities in accordance with their share as mutually agreed upon.
7. "Specialty Contractor" will mean a contractor provided and paid for by the Utility, and includes the Utilities' in-house field forces.
8. "Specific Public Work Items" will mean a detailed set of specifications prepared by the City based on the City's engineering, design and plans that will represent the Public Work portion of the Joint Bid Project and it is these unit price items and quantities related to the Public Work that will be bid upon and evaluated by the City for the Public Work portion of the City's construction contract.
9. "Specific Shared Items" will mean a detailed set of specifications prepared by the City based on the City's engineering, design and plans that will represent the Shared Items portion of the Joint Bid Project and it is these unit prices and quantities related to Shared Items that will be bid upon and evaluated by the City for the Shared Items portion of the City's construction contract.
10. "Specific Utility Work Items" will mean a detailed set of specifications prepared by the Utilities based on the Utility's Pre-engineering that will represent the Utility Work portion of the Joint Bid Project. The Specific Utility Work Items are composed of the Joint Bid Fixed Sum Items and Joint Bid Specialty Items, as described in Section A.2 below.

11. "Utility Facility(ies)" will mean the property owned by the Utilities, including, but not limited to, pipes, poles, conduits, wires, lines and other facilities, structures or property of the Utilities that may be below ground, at ground-level or above ground, that could disturb or interfere with the Public Work.
 12. "Utility" or "Utilities" will mean the utility entities participating in this Joint Bid Project.
 13. "Utility Work" will mean such work as is required to be performed by the Contractor during the performance of Public Work, as defined herein, in order to maintain, protect, support, shift, alter, relocate, remove, construct, and/or replace Utility Facilities at the Utilities' expense.
- B. The City is bidding jointly this Contract. The City has combined its Public Work and Utility Work into one bid contract package. All prospective bidders should be alerted to the fact that the City prepared all specifications, drawings, and all other necessary contract documents for the Public Work and Utility Work.
 - C. The City has prepared contract documents which include specifications, drawings and all other necessary contract documents for the Public Work and Utility Work. The bid items, specifications, and estimated quantities have been designed to fully compensate the Contractor for its costs to perform the Public Work and Utility Work.
 - D. The Contractor agrees that its bid prices and the NYC Utility Price List prices for the Public Work and Utility Work will include all incremental costs and/ or additional compensation for performing Public Work and Utility Work including: coordination of its work with the Utilities, loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, demobilization, remobilization, added cost or expense, loss of profit, other damages or impact costs that may be suffered by the Contractor because of direct or indirect obstructions due to the presence of Utility Facilities, such as conduits, ducts or duct banks containing conductors for live and/or abandoned electric, telephone, cable TV, any type of communication cables, "Non Cost Sharing" gas mains and services, steam mains, and various non-hazardous encasement materials or utility structures located within the Public Work project area.
 - E. In the bid solicitation documents, the City has provided estimated quantities for both Specific Public Work Items, Specific Utility Work Items, and Specific Shared Items. Bidders are required to bid a unit price on all Work in the Bid Schedules. For the purposes of identifying the lowest responsive and responsible bidder, a bidder's unit prices bid must be calculated based on all Work, which includes the combined Specific Public Work Items, the Specific Utility Work Items, and the Specific Shared Items.
 - F. If the Utility determines that the Contractor is not qualified or best suited to perform a specific scope of Utility Work, the Utility has the right to utilize their Specialty Contractors. If the Contractor claims that delays were caused by a Utility for failure to supply and/or provide Specialty Contractors in a timely manner, then the Contractor may bring a claim against the Utility. To the extent the Contractor claims that a delay was caused by a Utility, the Contractor will be limited to bringing such legal action in a court of law and may not seek arbitration over any delay claims or delay-related claims. If the Contractor and Utility initiate a legal action against each other, this legal action will be outside the jurisdiction of the City's Contract Dispute Resolution Board process and the City will not be a party in the litigation process. Neither the Contractor nor the Utility may bring a delay claim against the City through either a

court of law or the City's Contract Dispute Resolution Board process. Refer to the Standard Construction Contract for additional details. The Contractor must allow the Utility's Specialty Contractors to have reasonable access to the work area with prior notice and may, with the exception of the Utilities' in-house field forces, condition such access on proof of insurance acceptable to the Engineer.

- G. The Lower Manhattan Joint Bid Agreement, dated June 6, 2006, shall not apply to this project. The Contractor agrees that the Utilities are third-party beneficiaries of the contract for a Joint Bid Project, and that the Utilities shall be entitled to rely upon and enforce any and all terms and conditions of the Contract for a Joint Bid Project as it pertains to the Contractor and the performance of the Public Work, Shared Items, and Utility Work.

SECTION A.2 – Price List Method

A. This Contract has been prepared using the Price List Method. The Price List Method consists of all of the following.

1. The Contractor bids on the items listed in the Bid Schedule (“Bid Items”)
2. The Contractor agrees that the prices listed for items in the Price List (“PL Items”) represent full and complete compensation for the Specific Utility Work Items listed in the NYC Utility Price List. The NYC Utility Price List prices are fixed for the duration of the Contract, regardless of any time extensions.
3. The Bid Schedule contains Joint Bid Fixed Sum Items (“JB FS Items”) that will be used for payment of Utility Work. These items may include:

Item No.	Description	Unit
JB-FS-AL	ALTICE JB FIXED SUM	F.S.
JB-FS-CC	CROWN CASTLE JB FIXED SUM	F.S.
JB-FS-CE	CON EDISON JB FIXED SUM	F.S.
JB-FS-EX	EXTNET JB FIXED SUM	F.S.
JB-FS-NG	NATIONAL GRID JB FIXED SUM	F.S.
JB-FS-LI	LIPA-PSEG JB FIXED SUM	F.S.
JB-FS-RC	RCN JB FIXED SUM	F.S.
JB-FS-SP	CHARTER-SPECTRUM-TW JB FIXED SUM	F.S.
JB-FS-VZ	ECS-VERIZON JB FIXED SUM	F.S.

4. If this Contract contains Specialty JB items that are not covered by the NYC Utility Price List (“JB Specialty Items”), the Contractor will bid on the JB Special items listed in the separate JB Specialty Item Bid Schedule. For clarity, standard City items that are not used in the Bid Schedule may be used as JB Specialty Items.

B. Any costs that are to be paid for by the Utility will be paid according to the JB FS Items, whether the work is a Bid Item, PL Item, or JB Specialty Item.

C. There is no restriction as to which items may be used to pay for Utility Work – any Bid Item, PL Item (regardless of the utility), or JB Specialty Item (regardless of the utility) may be used. Utility may use any applicable item from the Bid Items, the PL Items, or the JB Specialty Items, whether for anticipated or unanticipated Utility work, regardless of whether the item is considered or defined as a City item, such Utility’s item, or another Utility’s item. In consultation with the Utilities, the Engineer is responsible for verifying the applicability of items proposed for use by the Utilities in accordance with any agreement in effect between the City and the Utilities. The arbitrator(s) under Section A.4 shall have the sole and exclusive authority to determine which items are applicable should there be a dispute between any Utility and the Contractor on such issue.

D. Quantities of work to be paid for under the JB FS Items must be tracked separately from the quantities of work paid for under the Bid Items. The method and format of separate tracking must be submitted to the Engineer for review and processing.

E. Overruns:

1. Bid Items: Quantities of Bid Items paid for according to the JB FS Items are not overruns for the purpose of Standard Construction Contract Article 26.1. However, if the City negotiates a new unit price for an item per Article 26.1, that new unit price will also be used for payment under the JB FS Items.

2. **JB FS Items:** The City will not pay the Contractor directly when there is an overrun of the JB FS Items, except when the City's RE determines that such overruns are caused by field conditions impacting planned City work, or scope of work changes. Overruns not paid by City will be paid directly to Contractor by the Utility at the established unit rate for the Bid Items, the PL Items, or the JB Specialty Items and according to the same retainage requirements as applicable between the City and the Contractor. In order to facilitate the shared cost reconciliation between the City and the Utilities, the Contractor must provide details of all payments from the Utilities. These details must include the items, quantities, and amounts that are covered by the payment.

In the event that funds are insufficient in the Utility budget code to continue payments under the JB FS Item, the Engineer may determine that all future payments under the JB FS Item are overruns, and will be paid directly to the Contractor by the Utility as specified in the paragraph above.

F. Extra Work:

1. If during construction the Contractor encounters utility facilities interferences or utility scope of work that it believes is not covered by the Contract, then the Contractor must immediately notify the City and the Utility in writing, describing the nature and location of the extra work in question. The Utility then has five (5) business days to investigate the conditions and then either:
 - i. Advise the Contractor and the City in writing that no interference with its facilities exists at the location in question, and hence that the Contractor may proceed with City work without providing for any impact from Company facilities;
 - ii. Advise the Contractor and the City in writing that the Contract items provide for the scope of work encountered, specifying the exact unit items that cover the work;
 - iii. Advise the Contractor and the City in writing that it intends to perform the necessary utility work with Utility forces or with Specialty Contractors, but not limited to, relocating its facility out of the way of the proposed City work. In this case, the Utility must provide a written schedule for the performance of the utility work it proposes to perform, which shall be subject to approval by the City based on its impact to the Contractor's currently approved progress schedule. Upon approval of the Utility's schedule by the City, the Contractor must provide access to the worksite to the Utility and/or any Specialty Contractors hired by it to perform this utility work. If necessary, the City may grant a contract time extension for delays caused by the performance of such utility work by the Utility.
 - iv. Reasonably specify in writing the scope of work to be performed by the Contractor on behalf of the Company that is not covered under the Contract, including, but not limited to, relocating, supporting, and/or protecting the Utility's facilities, and/or shifting the City facility if approved by the Engineer, and/or otherwise changing its operations to work in the presence of the Utility's facilities. Should the Utility elect this option, it must adequately define and provide an initial price offer for the work required to be performed.
2. For items not included in the Bid Items, PL Items, or JB Specialty Items ("Utility Extra Work"), the Utility and the Contractor will directly negotiate unit rates, lump sum amounts, or agree to payment on a Time and Material Basis. In this case, the

requirements above for overruns apply for payment. The Utility may select whether the Extra Work will be paid under the appropriate JB FS Item or paid directly from the Utility, unless such payment would cause an overrun of the JB FS Item and the Extra Work will be paid directly from the Utility. In this case, the requirements above for overruns apply for payment. If Extra Work agreed to on a Time and Material Basis is not calculated in accordance with Article 26 of the Standard Construction Contract, this Extra Work must be paid directly to the Contractor by the Utility.

In order to facilitate the shared cost reconciliation between the City and the Utilities, the Contractor must provide details of all payments from the Utilities. These details must include the items, quantities, and amounts that are covered by the payment.

G. Overtime on Utility Work:

The Contractor will be paid under this article for Utility Work deemed necessary by the Commissioner (in consultation with the Utility) to accelerate Specific Utility Work Items during critical periods. Such accelerated Utility Work includes:

- A. 100% of the premium portions of overtime pay for working during non-scheduled work hours which must be defined as those hours of work outside the permissible hours stated in the original contract OCMC Traffic Stipulations; or,
- B. The premium portion of overtime pay for overtime actually worked beyond the 40-hour work week but within the permissible hours of work stated in the original contract OCMC Traffic Stipulations; or,
- C. All other incidental expenditures caused by modifications of project site regulations or administrative requirements ordered by the Commissioner (in consultation with the Utility) that result in additional costs to perform Contract Work as specified.

Such accelerated Utility Work must be paid for under the appropriate JB FS Item in accordance with the requirements of Articles 25 and 26 of the Standard Construction Contract.

Payment made under this article must cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the work as ordered by the Commissioner (in consultation with the Utility).

This article may only be applied to Utility Work performed prior to Substantial Completion of the Project.

SECTION A.3 - Standard Specifications for Joint Bid Work

- A. The Contractor is be responsible for performing work in accordance with the Private Utilities reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", dated August 1, 2005, as amended below and in Section C.
- B. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 450, pages 56, 57, and 58;

Note: Items under JB 450 are task driven operation items and are not based on crew size. These items are divided into three unique types, each of which provides a description of applicability and typical use. The "Method of Measurement", on page 57, states that "The actual crew performing the operation will not be considered by the facility operator, in consultation with the Resident Engineer, when determining the applicable Unit Item Type, which will be only as per the task performed."

- C. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article A. Description;

Delete the last four lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";

Substitute the following revised text: "accordance with Specification Section 7.18 – Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 will be of controlled low strength material (CLSM) in compliance with requirements of Section 7.18, and its cost will be deemed included in this item."

- D. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article B. Materials;

Delete the first sentence in its entirety, beginning with the words: "Furnish Controlled Low Strength Material fill or backfill . . ."; Substitute the following revised sentence: "Furnish Controlled Low Strength Material fill or backfill as required and specified in Section 7.18 – Controlled Low Strength Material (CLSM), of the Standard Highway Specification."

- E. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article A. Description;

Delete the last five lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";

Substitute the following revised text: "accordance with Specification Section 7.18 – Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 will be of controlled low strength material (CLSM) backfill in compliance with Section 7.18 in the Standard Highway Specifications, and its cost will be deemed included in this item."

- F. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article B. Materials;

Delete the first sentence in its entirety, beginning with the words: "Furnish controlled low strength material fill or backfill . . .";

Substitute the following revised sentence: "Furnish controlled low strength material fill or backfill as required and specified in Section 7.18 – Controlled Low Strength Material (CLSM), of the Standard Highway Specification."

- G. Section JB 350 is not applicable and deemed deleted. The Contractor will not be paid separately to modify means and methods around overhead utilities; those costs must be included in the prices bid for all work.
- H. Section JB 900 is not applicable and deemed deleted.

SECTION A.4 – Resolution of Certain Disputes Arising Between the Contractor and the Utilities
(Appendix “JB-A”)

A.1.0 Applicability. In recognition of the usefulness of a process of alternative dispute resolution for its efficiency, speed and cost-effectiveness in managing conflict and settling disputes that may arise under, or by virtue of, these special provisions of Joint Bidding, the City and Utilities have agreed to the procedures set forth in this **Appendix “JB-A.”** Accordingly, this **Appendix “JB-A”** will apply to disputes between the Contractor and the Utilities that arise in relation to this Contract, except for those disputes between the Contractor and the Utilities relating to delay claims, as described in Section A.1, Article F of these JB-Pages.

A.1.1 The Utilities’ Responsibilities. If the Utility identifies an issue in the payment requisition for the Utility Work, the Utility will immediately notify the City and the Contractor by a written notice. After sending such written notice, the Utility agrees to meet with the Contractor to resolve the issue. If the issue cannot be resolved, then the Utility or the Contractor will seek to resolve the issue through the arbitration process as set forth herein.

A.1.2 No Extra Or Disputed Work. If the Utility determines that the alleged extra Utility Work or the disputed Utility Work is part of the City’s Contract Documents and denies the Contractor’s claim or request for a change order, then after receiving the Utility’s written response, the Contractor will either accept the Utility’s determination or immediately seek to have the issue resolved through the arbitration process as set forth herein.

A.1.3 Extra Work. If the Utility determines that there is extra Utility Work, the extra Utility Work will be paid for based on the contract rates as set forth in A.2 of these JB-Pages. If all or a portion of the agreed upon extra Utility Work items are not in the contract rates, then the Utility and the Contractor will negotiate the cost of the extra Utility Work with each other with the understanding that the performance of Public and Utility Work will continue during all negotiations and discussions. If the parties reach an agreement on cost for the extra Utility Work, then the Contractor and the Utility will submit to the City’s RE a copy of the agreed upon prices together with supporting documentation. If the parties do not reach an agreement on cost for the extra Utility Work, then the parties will immediately arbitrate the issue as set forth herein.

A.2.0 Joint Bid Projects. Disputes that arise under this Appendix, as described above in paragraph A.1.0, will be resolved in accordance with the provisions of this **Appendix “JB-A”.** **Appendix “JB-A”** will NOT apply to any disputes between the City and the Contractor, or any disputes between the City and the Utilities. Since the arbitration of Utility interference disputes, as described in Article A.1.0 above, is a matter solely between the Utilities and the Contractor, and since the parties agree to reduce or eliminate any costs to the City relating to any arbitration pursuant to this **Appendix “JB-A”**, the parties hereby agree that:

A.2.1 The City will not be a party in the arbitration process;

A.2.2 Neither the Contractor nor the Utilities will call as a witness in the arbitration process any City employee, agent or consultant, including the City’s RE, his staff or City inspection personnel;

A.2.3 The City will not be responsible for any costs, fees or monetary awards or price adjustments associated in any way with the arbitration process described in this **Appendix “JB-A”**; and

A.2.4 Notwithstanding Articles A.2.1 and A.2.2, the City’s obligation to furnish information to the parties will be limited to those requests as set forth under the New York State Freedom of Information Law, as amended.

A.3.0 Pre-Arbitration Procedures.

A.3.1 Should a dispute arise between any Utility and the Contractor pursuant to Article A.1.0 of this Appendix, the disputing party will notify the City and the other party in writing within two (2) Business Days of the dispute that a dispute exists, and briefly describe; (i) the nature of the dispute; and (ii) the proposed resolution and rationale supporting its proposal.

A.3.2 After notifying the City of the dispute, the disputing parties will have fifteen

(15) Business Days to meet, discuss the issues, exchange documents and/or exchange offers with due diligence and in good faith in order to reach an agreement and resolve the dispute.

- A.3.3. If the disputing parties reach an agreement, they will immediately notify the City in writing that the dispute has been resolved and describe the terms of the resolution.
- A.3.4. If the disputing parties have not reached an agreement within fifteen (15) Business Days of the date the City was first notified of the dispute, the Contractor will, within five (5) Business Days thereafter, submit to the Utility a written Final Offer, which will consist of: (i) a description (e.g., units and quantities) of all reasonable and necessary disputed work or extra work which the Contractor contends are not covered by application of the contract rates; and (ii) a detailed breakdown of the Contractor's proposed prices (e.g., unit prices and quantities) for such work.
- A.3.5. Upon receipt of the Contractor's Final Offer, the Utility will, within five (5) Business Days, either accept the Contractor's Final Offer or submit to the Contractor a written Final Offer which will consist of: (i) a description (e.g., units and quantities) of all reasonable and necessary disputed work or extra work, if any; and (ii) a detailed breakdown of the Utility's proposed prices (e.g., unit prices and quantities) for such work, if applicable.
- A.3.6. Once Final Offers have been exchanged by the parties, they may not be modified or withdrawn by either party except by mutual agreement or final settlement of the dispute.
- A.3.7. Upon exchange of Final Offers, the Contractor will have three (3) Business Days, to either accept or reject the Utility's Final Offer. If the Contractor rejects the Utility's Final Offer, then either the Contractor or the Utility will submit the dispute to the American Arbitration Association ("AAA") to be resolved in accordance with the Construction Industry Arbitration Rules ("Rules") in effect on the date the arbitration is initiated, except as such Rules are modified herein.
- A.3.8. Each of the steps described above will be a condition precedent to the obligations of the parties in succeeding steps. Since **Time is of the Essence**, should either party fail to comply with any of the pre-arbitration procedures described above, that party will be deemed to be in default. If, upon receipt of written notice of default by the other party, the defaulting party has not cured the default within three (3) Business Days, the other party may proceed to arbitration solely on the issue of whether the defaulting party was in default of these pre-arbitration procedures. If, after hearing evidence, the arbitrator(s) determine that the defaulting party was in default of these pre-arbitration procedures, then the arbitrator(s) will enter a final decision in favor of the other party in accordance with the Final Offer submitted by the other party or, if no Final Offer has been submitted prior to the default, according to the last written proposal submitted by the other party.

A.4.0 General Provisions.

- A.4.1. The Utility agrees to pay for any disputed or extra Utility Work while the arbitration proceeding is pending based on the Utility's Final Offer.
- A.4.2. All determinations by the parties required by this **Appendix "JB-A"** will be clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination.
- A.4.3. The Utility agrees to copy the City on all communications involving the arbitration process and to notify the City of the final determination.
- A.4.4. The Utility agrees to pay the Contractor directly for any final settlement for extra Utility Work that may be agreed to by the Utilities and the Contractor or any final award for extra Utility Work issued by the arbitrator(s), less credits for any payments previously made by the Utility to the Contractor.
- A.4.5. All of the contract defined terms will apply here, as if they were re-stated herein.

- A.4.6 Since **Time Is Of The Essence** on all Joint Bid Projects, whenever there is a dispute pursuant to this **Appendix "JB-A"**, the terms of the City's Construction Contract will remain in full force and effect, and the Contractor will continue performing all of the Contract Work and the Utility Work as directed by the City.
- A.4.7 The timeframes set forth herein have been established to ensure that the Joint Bid Project does not stop for any disputes between the Contractor and the Utility.
- A.4.8 All of the timeframes are measured in Business Days, which include Monday, Tuesday, Wednesday, Thursday and Friday, but exclude holidays.
- A.4.9 For all disputes that arise under **Appendix "JB-A"**, the City's role will be limited to receiving copies of all written communications.
- A.4.10 The Contractor and all subcontractors hired by it agree to waive any rights they may have, if any, under law, equity, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives or so-called "order outs" under the New York City Administrative Code, to require any or all of the Utilities to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove Utility facilities in connection with work to be performed under this contract. However, nothing in this Agreement will preclude the City from exercising its rights under the law, including the right to issue such a directive to a Utility.
- A.4.11 Each Utility will be named as an additional insured on all insurance policies required to be maintained by the Contractor in connection with the Joint Bid Project. The actual incremental cost, if any, to the Contractor of providing such insurance coverage will be borne by the Contractor. The Contractor will provide a written statement from its insurance provider documenting this added coverage to the Utility. Under no circumstances will the cost of insurance coverage on behalf of the Utility be borne by the City. Nothing in this paragraph will be interpreted to imply the City's acceptance of any additional responsibility or liability for any matter related to the performance of Utility Work. In particular, with regard to any Utility Work performed in accordance with or through this **Appendix "JB-A"**, the Utility and the Contractor bear joint and full responsibility to ensure that any Utility Work performed by the Contractor is in compliance with all applicable government and Utility regulations.

A.5.0 The Arbitration Procedures.

- A.5.1 Once the AAA has appointed an arbitrator(s), the arbitration will be scheduled as promptly as possible given the arbitrator(s) and the parties' schedules.
- A.5.2 No later than fourteen (14) calendar days prior to the first day of arbitration, the Utility and Contractor will submit to the arbitrator(s), and to each other, a summary of each party's respective position, all documentary, photographic or physical evidence on which the party intends to rely, and such other information as is deemed appropriate, along with a copy of each party's "Final Offer" as described above.
- A.5.3 The arbitration will be conducted and concluded in two (2) days.
- A.5.4 On the morning of the first (1st) day of the arbitration, Contractor and/or representatives will have 3½ hours to make a presentation of its claim to the arbitrator(s). During its presentation, Contractor will not be permitted to produce any evidence that has not already been provided to the Utility and the arbitrator(s) pursuant to Paragraph A.5.2, above. Contractor will be permitted to produce any analysis or description of its claim that has been prepared for the purpose of its presentation.
- A.5.5 After the Contractor's presentation, Utility and/or its representatives will have 2 hours to ask the Contractor questions about its claim and its presentation. Thereafter, the arbitrator(s) will have 2 hours to ask the Contractor questions about its claim and its presentation.

- A.5.6 On the morning of the second (2nd) day of the arbitration, Utility and/or its representatives will have 3½ hours to make a presentation of its claim to the arbitrator(s). During its presentation, the Utilities will not be permitted to produce any evidence that has not already been provided to the Contractor and the arbitrator(s) pursuant to Paragraph A.5.2, above. The Utility will be permitted to produce any analysis or description of its claim that has been prepared for the purpose of its presentation.
- A.5.7 After the Utility's presentation, the Contractor and/or its representatives will have 2 hours to ask the Utility questions about its claim and its presentation. Thereafter, the arbitrator(s) will have 2 hours to ask the Utility questions about its claim and its presentation.
- A.5.8 Subject to the above maximum time limitations set forth above, the arbitrator(s) may conduct the arbitration in such manner as the arbitrator(s) deems reasonable.
- A.5.9 The arbitrator(s) will then have one (1) week to select in writing, as the arbitrators' award, that party's Final Offer that appears to be more reasonable, based on the presentations at the arbitration hearings.
- A.5.10 The arbitrator(s) will have no discretion to grant an award other than one of the two (2) Final Offers submitted by the parties.
- A.5.11 The arbitration award will be final and binding upon the parties to the arbitration and judgment upon the award may be entered in a court having jurisdiction.
- A.5.12 Any award for work that has already been performed will be paid on the 7th day after receipt of the arbitrator's decision, or on the 30th day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision will be paid within thirty (30) calendar days of completion of work. Interest will accrue from the date payment is due at the rate of nine (9%) percent per annum. Either party may cause judgment to be entered in accordance with the decision of the arbitrator(s) in a court in the State of New York, County of New York.
- A.5.13 The Utility and the Contractor initially will share the arbitrator's(s') fees and any other costs of the arbitration equally. The non-prevailing party will then pay all arbitrator's(s') fees and costs of the arbitration and will reimburse the prevailing party for its share of such fees and costs theretofore paid.
- A.5.14 The parties may, at any time, settle any matter submitted to arbitration.
- A.5.15 Since **Time is of the Essence**, should any party, at any time after the dispute has been submitted for arbitration, materially fail to comply with: (i) the Rules, (ii) any of these arbitration procedures, or (iii) any procedural decisions by the arbitrator(s), then the arbitrator(s) will enter an order directing the party to cure its non-compliance within five (5) Business Days. If the party fails to comply with the order of the arbitrator(s) order within the five (5) Business Days, upon receipt of evidence that the non-complying party has failed to comply with the arbitrator's(s') order, the arbitrator(s) will enter a final decision in favor of the other party in accordance with the other party's Final Offer.

**END OF JB-PAGES SECTION A
(NO FURTHER TEXT ON THIS PAGE)**

**SECTION B. NYCDDC INFRASTRUCTURE DIVISION
JOINT BID UTILITY PRICE LIST**

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .1)	EACH	\$ 573
JB 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .2)	EACH	\$ 858
JB 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .3)	EACH	\$ 1,125
JB 100.4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .4)	EACH	\$ 1,368
JB 100.5	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .5)	EACH	\$ 1,883
JB 100.6	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .6)	EACH	\$ 2,012
JB 100.7	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .7)	EACH	\$ 2,182
JB 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EACH	\$ 2,862
JB 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EACH	\$ 3,284
JB 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EACH	\$ 4,428
JB 101.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .4)	EACH	\$ 4,686
JB 101.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .5)	EACH	\$ 5,673
JB 101.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .6)	EACH	\$ 6,208
JB 101.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .7)	EACH	\$ 6,284
JB 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EACH	\$ 3,565
JB 102.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	EACH	\$ 4,006
JB 102.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .3)	EACH	\$ 4,780
JB 102.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .4)	EACH	\$ 5,465
JB 102.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .5)	EACH	\$ 6,056
JB 102.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .6)	EACH	\$ 6,413
JB 102.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .7)	EACH	\$ 7,526
JB 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	EACH	\$ 4,178
JB 103.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .2)	EACH	\$ 4,910
JB 103.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .3)	EACH	\$ 6,109
JB 103.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .4)	EACH	\$ 7,183
JB 103.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .5)	EACH	\$ 8,594

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 103.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .6)	EACH	\$ 9,213
JB 103.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .7)	EACH	\$ 9,832
JB 104.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .1)	EACH	\$ 4,601
JB 104.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .2)	EACH	\$ 5,088
JB 104.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .3)	EACH	\$ 6,071
JB 104.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .4)	EACH	\$ 6,821
JB 104.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .5)	EACH	\$ 7,943
JB 104.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .6)	EACH	\$ 8,311
JB 104.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .7)	EACH	\$ 8,835
JB 105.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .1)	EACH	\$ 4,933
JB 105.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .2)	EACH	\$ 5,460
JB 105.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .3)	EACH	\$ 6,744
JB 105.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .4)	EACH	\$ 7,854
JB 105.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .5)	EACH	\$ 9,426
JB 105.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .6)	EACH	\$ 10,001
JB 105.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .7)	EACH	\$ 9,372
JB 106.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .1)	EACH	\$ 5,156
JB 106.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .2)	EACH	\$ 5,689
JB 106.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .3)	EACH	\$ 7,013
JB 106.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .4)	EACH	\$ 8,152
JB 106.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .5)	EACH	\$ 9,659
JB 106.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .6)	EACH	\$ 10,240
JB 106.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .7)	EACH	\$ 10,821
JB 107.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .1)	EACH	\$ 5,442
JB 107.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .2)	EACH	\$ 6,079
JB 107.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .3)	EACH	\$ 7,402

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 107.4	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .4)	EACH	\$ 8,592
JB 107.5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .5)	EACH	\$ 10,314
JB 107.6	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .6)	EACH	\$ 10,709
JB 107.7	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .7)	EACH	\$ 11,104
JB 108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	EACH	\$ 873
JB 108.2	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	EACH	\$ 1,503
JB 108.3	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)	EACH	\$ 2,139
JB 108.4	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4)	EACH	\$ 2,733
JB 108.5	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .5)	EACH	\$ 3,186
JB 108.6	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .6)	EACH	\$ 3,568
JB 108.7	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .7)	EACH	\$ 4,373
JB 109.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EACH	\$ 1,265
JB 109.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	EACH	\$ 1,758
JB 109.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	EACH	\$ 2,378
JB 109.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	EACH	\$ 3,045
JB 109.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	EACH	\$ 3,530
JB 109.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .6)	EACH	\$ 3,956
JB 109.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .7)	EACH	\$ 4,100
JB 110.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1)	EACH	\$ 1,649
JB 110.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2)	EACH	\$ 2,126
JB 110.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3)	EACH	\$ 2,744
JB 110.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4)	EACH	\$ 3,466
JB 110.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .5)	EACH	\$ 4,055
JB 110.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .6)	EACH	\$ 4,663
JB 110.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .7)	EACH	\$ 5,453
JB 111.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	EACH	\$ 2,054

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 111.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	EACH	\$ 2,748
JB 111.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	EACH	\$ 3,656
JB 111.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4)	EACH	\$ 4,652
JB 111.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .5)	EACH	\$ 5,491
JB 111.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .6)	EACH	\$ 6,228
JB 111.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .7)	EACH	\$ 7,781
JB 112.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .1)	EACH	\$ 2,050
JB 112.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .2)	EACH	\$ 2,657
JB 112.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .3)	EACH	\$ 3,687
JB 112.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .4)	EACH	\$ 4,753
JB 112.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .5)	EACH	\$ 5,574
JB 112.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .6)	EACH	\$ 6,273
JB 112.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .7)	EACH	\$ 7,413
JB 113.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .1)	EACH	\$ 2,361
JB 113.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .2)	EACH	\$ 3,198
JB 113.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .3)	EACH	\$ 4,249
JB 113.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .4)	EACH	\$ 5,340
JB 113.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .5)	EACH	\$ 6,135
JB 113.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .6)	EACH	\$ 6,914
JB 113.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .7)	EACH	\$ 8,046
JB 114.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .1)	EACH	\$ 2,492
JB 114.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .2)	EACH	\$ 3,599
JB 114.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .3)	EACH	\$ 5,401
JB 114.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .4)	EACH	\$ 7,013
JB 114.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .5)	EACH	\$ 8,301
JB 114.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .6)	EACH	\$ 9,188

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 114.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .7)	EACH	\$ 9,474
JB 115.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .1)	EACH	\$ 2,874
JB 115.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .2)	EACH	\$ 4,116
JB 115.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .3)	EACH	\$ 6,065
JB 115.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .4)	EACH	\$ 7,994
JB 115.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .5)	EACH	\$ 9,455
JB 115.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .6)	EACH	\$ 10,379
JB 115.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .7)	EACH	\$ 10,742
JB 116.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .1)	EACH	\$ 3,118
JB 116.2	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .2)	EACH	\$ 4,480
JB 116.3	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .3)	EACH	\$ 6,478
JB 116.4	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .4)	EACH	\$ 8,628
JB 116.5	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .5)	EACH	\$ 10,236
JB 116.6	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .6)	EACH	\$ 11,263
JB 116.7	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .7)	EACH	\$ 11,627
JB 200	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	\$ 190
JB 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EACH	\$ 4,018
JB 225.1B	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES AT AN ADDITIONAL DEPTH OF UP TO 3 FEET	EACH	\$ 4,548
JB 225.2A	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EACH	\$ 2,009
JB 225.2B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES AT AN ADDITIONAL DEPTH OF UP TO 3 FEET	EACH	\$ 2,539
JB 225.3A	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EACH	\$ 1,845
JB 300A	SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG)	C.Y.	\$ 312
JB 300.1	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH LESS THAN 5' DEEP	C.Y.	\$ 229

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 300.2	SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH GREATER THAN 5' DEEP	C.Y.	\$ 265
JB 301	SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPE	C.Y.	\$ 316
JB 303	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	C.Y.	\$ 52
JB 306	SPECIAL CARE EXCAVATION AND BACKFILLING WITHIN A CITY TRENCH	C.Y.	\$ 272
JB 330E	SUPPORT AND PROTECTION OF UTILITY FACILITIES DURING EXCAVATION	L.F.	\$ 232
JB 330G	SUPPORTS FOR PARALLEL FULLY EXPOSED GAS MAINS IN TRENCH	EACH	\$ 1,629
JB 330T1	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED CITY TRENCH	L.F.	\$ 157
JB 330T2.1	COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH BE WIDENED	L.F.	\$ 319
JB 330T2.2	COMMUNICATION FACILITY OPERATOR(S) REQUESTS THE TRENCH / SHEETING BE MODIFIED	L.F.	\$ 448
JB 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EACH	\$ 1,416
JB 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	\$ 242
JB 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	\$ 284
JB 401A	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT	C.Y.	\$ 349
JB 401AC	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF CABLE TV FACILITIES CONNCTED TO THE BASE PAVEMENT	C.Y.	\$ 96
JB 401AT	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF TELECOMMUNICATION FACILITIES CONNECTED TO OR NEAR THE BASE PAVEMENT	C.Y.	\$ 105
JB 402.1	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 64
JB 402.1A	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 73
JB 402.2	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 42

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 402.2A	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 52
JB 402T.1	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 64
JB 402T.1A	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 69
JB 402T.2	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 46
JB 402T.2A	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 60
JB 402T.3	ACM REMOVAL AND DISPOSAL OF VERIZON/ECS CONDUITS WITH ASBESTOS CONTAINING MATERIAL TRANSITE PIPES (ACM-TP) UP TO AND INCLUDING 4" DIAMETER	L.F.	\$ 90
JB 402T.J1	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT	L.F.	\$ 64
JB 402T.J1A	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT	L.F.	\$ 72
JB 402T.J2	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT	L.F.	\$ 53
JB 402T.J2A	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT	L.F.	\$ 60
JB 402T.R1A	EXISTING CONCRETE ENCASED STEEL/IRON CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 67
JB 402T.R2A	EXISTING NON - CONCRETE ENCASED STEEL/IRON CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 53
JB 402T.V1	EXISTING VACANT CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 65
JB 402T.V1A	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 45

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 402T.V2	EXISTING VACANT NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 54
JB 402T.V2A	EXISTING VACANT NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 61
JB 403	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	S.F.	\$ 4
JB 403T.1	FURNISH AND INSTALL STEEL PROTECTION PLATES FOR UTILITY FACILITIES (1/4" THICK)	S.F.	\$ 16
JB 403T.2	FURNISH AND INSTALL STEEL PROTECTION PLATES FOR UTILITES FACILITES (3/8" THICK)	S.F.	\$ 20
JB 404	PIER & PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS AND OTHER SHALLOW FACILITIES	S.F.	\$ 664
JB 405.1	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	C.Y.	\$ 368
JB 405.2	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING	C.Y.	\$ 445
JB 406	EXCAVATION FOR UTILITY STRUCTURE	C.Y.	\$ 307
JB 410.1	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)	C.Y.	\$ 367
JB 410.2	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)	C.Y.	\$ 437
JB 410.3	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% (TYPE .3)	C.Y.	\$ 510
JB 410.4	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% (TYPE .4)	C.Y.	\$ 630
JB 410.5	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .5)	C.Y.	\$ 713
JB 410.6	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .6)	C.Y.	\$ 747

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 410.7	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	C.Y.	\$ 828
JB 410.8	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	C.Y.	\$ 910
JB 450.1	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	CREW/HR	\$ 353
JB 450.2	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	CREW/HR	\$ 388
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	CREW/HR	\$ 998
JB 450.4	CONSTRUCTION FIELD SUPPORT - LARGE SIZE CREW (TYPE .4)	CREW/HR	\$ 1,363
JB 450.5	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .5) PIPE-RIPPING SUPPORT	CREW/HR	\$ 835
JB 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	\$ 5
JB 501	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	\$ 308
JB 603E.1	INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	\$ 4
JB 603E.2	INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 8
JB 603T.1	INSTALL 1 EACH 2", 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 7
JB 603T.2	INSTALL 2 EACH 2", 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 14
JB 603T.3	INSTALL 4 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 23
JB 603T.4	INSTALL 6 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 45
JB 603T.5	INSTALL 8 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 61
JB 603T.6	INSTALL 12 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 91
JB 603T.7	INSTALL 15 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 113
JB 603T.8	INSTALL 24 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 182
JB 603T.9	INSTALL 30 EACH 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 212
JB 636 EA	ADJUSTMENT OF UTILITY HARDWARE (UNDER 7" WIDTH)	EACH	\$ 212
JB 636 EB	ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	EACH	\$ 356
JB 636 EC	ADJUSTMENT OF UTILITY HARDWARE (14" TO UNDER 30" WIDTH)	EACH	\$ 905
JB 636 ED	ADJUSTMENT OF UTILITY HARDWARE (30" TO UNDER 34" WIDTH)	EACH	\$ 950

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 636 EE	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	EACH	\$ 1,086
JB 636 EG	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75" WIDTH)	EACH	\$ 1,222
JB 636 EH	ADJUSTMENT OF UTILITY HARDWARE (75" TO UNDER 125" WIDTH)	EACH	\$ 1,371
JB 636 EI	ADJUSTMENT OF UTILITY HARDWARE (125" TO UNDER 170" WIDTH)	EACH	\$ 1,512
JB 636 MA	ADJUSTMENT OF UTILITY HARDWARE 7" to 30" MILLING / RESURFACING	EACH	\$ 129
JB 636 MB	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	EACH	\$ 156
JB 636 MC	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (14" TO UNDER 30" WIDTH)	EACH	\$ 170
JB 636 MD	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (30" TO UNDER 34" WIDTH)	EACH	\$ 183
JB 636 ME	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	EACH	\$ 206
JB 636 MG	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (41" TO UNDER 75" WIDTH)	EACH	\$ 233
JB 636 MH	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (75" TO UNDER 125" WIDTH)	EACH	\$ 265
JB 636 MI	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (125" TO UNDER 170" WIDTH)	EACH	\$ 299
JB 636 R	REPAIR TO UTILITY STRUCTURES	C.Y.	\$ 267
JB 636 SA	CONCRETE COLLAR AROUND STEAM CASTINGS	S.F.	\$ 15
JB 636 SB	ADJUSTMENT TO UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH)	EACH	\$ 243
JB 636 SC	ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH)	EACH	\$ 718
JB 638 N	INSTALLATION OF FIELD CONSTRUCTED UTILITIES STRUCTURES.	C.Y.	\$ 1,256
JB 638 NT	INSTALLATION OF FIELD CONSTRUCTED TELEPHONE/COMMUNICATIONS UTILITY STRUCTURE	C.Y.	\$ 3,539
JB 638 R	BREAK OUT AND REMOVE UTILITY STRUCTURE	C.Y.	\$ 686

NYCDDC Infrastructure Division - Joint Bid Utility Price List

Item No.	Item Description	Unit	Price
JB 638 RT	BREAK OUT AND REMOVE TELEPHONE/COMMUNICATIONS UTILITY STRUCTURE CONTAINING ACTIVE CABLES	C.Y.	\$ 6,991
JB 700	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	C.Y.	\$ 95
JB 710.1	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	L.F.	\$ 16
JB 710.2	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, OVER 12" AND UP TO AND INCLUDING 20" DIAMETER PIPE	L.F.	\$ 18
JB 710.3	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON PIPE, STRUCTURE OPENINGS GREATER THAN 20"	L.F.	\$ 45
JB 711	USE SHEETING LINE AS FORM	L.F.	\$ 7
JB 781	REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS	EACH	\$ 1,609
JB 798	MODIFICATION OF NON-CONCRETE YOKE TROLLEY STRUCTURES REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	\$ 331
JB 799	MODIFICATION OF NON-CONCRETE YOKE TROLLEY STRUCTURES REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	\$ 105
JB 800	MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	\$ 248
JB 801	MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	\$ 126
JB 802A	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	S.F.	\$ 5
JB 802B	SPECIAL CARE EXCAVATION AND RESOTRATION FOR CURB WORK	L.F.	\$ 12
JB 803.1	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH RDWY REMOVAL (LINE CUT ASPHALT)	L.F.	\$ 11
JB 803.2	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	L.F.	\$ 22
JB 803.3	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ASPHALT, CONCRETE AND BELGIAN BLOCK ROADWAY REMOVAL OPERATIONS	L.F.	\$ 31

**END OF JB-PAGES SECTION B
(NO FURTHER TEXT ON THIS PAGE)**

**SECTION C. JOINT BID SPECIAL
SPECIFICATIONS**

SPECIALTY ITEMS AND SPECIFICATIONS

The specialty items and specifications listed below are special specifications which are provided within Section C of the Joint Bid Package that are not found within in the "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN", (Issued on August 1, 2005) and the "NYCDDC Infrastructure-Joint Bid Utility Price List".

Con Edison:

Specification No.	Description	Units	Quantity
JB 950E	INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES	L.S.	1

Verizon:

Specification No.	Description	Units	Quantity
JB 950T	MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES	L.S.	1

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

DESCRIPTION

This work shall consist of furnishing and installing NEW CON EDISON FACILITIES in accordance with the contract documents and as directed by the Engineer. Work includes furnishing and installing new electrical ducts including: structural steel supports, conduit excavation and backfill, new precast and field constructed manholes, new points of entry into existing structures, and concrete wall modifications of existing manholes to allow for the installation of conduits as well as removal of existing conduits as shown on contract documents. The Contractor shall supply all labor, supervision, equipment, plant, maintenance & protection of traffic, transportation, handling, storage, materials, insurance, scaffolding/access and incidentals to perform the work.

MATERIALS

All Structural Steel including Rods shall be A.S.T.M. A709 GR50 and shall conform to the requirements of Subsection 715-01 of the NYSDOT Standard Specifications.

All Bolts shall conform to A.S.T.M. A325, Type 3 (plain) and shall conform to the requirements of Subsection 715-14 of the NYSDOT Standard Specifications.

All Nuts shall be A.S.T.M. A563, Grade DH3 (plain) and conform to the requirements of Subsection 715-14 of the NYSDOT Standard Specifications.

All Washers shall be A.S.T.M. F436, Type 3 (plain) and conform to the requirements of Subsection 715-14 of the NYSDOT Standard Specifications.

Bar reinforcement shall be epoxy-coated and meet the requirements of Subsection 709-04, Grade 420 of the NYSDOT Standard Specifications.

Dimensions for lumber and timber required for general construction purposes shall be standard dressed sizes. For Wood block support details refer to Con Edison drawing EO-9217-C.

Materials furnished & delivered by Con Edison to the site shall consist of the following:

CONDUITS AND DUCTS:

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

1. Molded plastic plugs for unoccupied ducts per Con Edison drawing EO-10864D.
2. 1/4" polypropylene pulling rope.
3. Mandrel & wire brush per Con Edison drawing EO-16734-B
4. All steel conduits per Con Edison specification CE-TS-4197, in double random length (50 feet maximum).
5. Concrete Adapters per EO-9947-D.

MANHOLES AND BOXES

Con Edison shall furnish steel/iron castings consisting of manhole/box frames and covers, floor sump gratings and pulling eyes.

Materials furnished by the Contractor shall include:

MISCELLANEOUS

1. The Contractor shall furnish concrete, structural steel and epoxy-coated reinforcing steel for all precast and cast-in-place manholes and chimneys, grout/mortar, brick and inserts.
 - a. The class of concrete and structural steel used for manhole/box construction and related structures shall be as specified on drawing EO-1008. Waterstops shall be provided at all joints when not monolithically poured. Structural steel shall also conform to the requirements of A.S.T.M. A709. Con Edison reserves the right to make minor changes to the design of structures.
2. Welding sleeves for pipe connections on steel conduits system per Con Edison EO- 6947-D.
3. All materials used to support, protect and maintain existing electric cables and conduit during manhole/box installation shall be supplied by the Contractor and shall be as approved by the Engineer in consultation with Con Edison.
4. All structural steel supports and connections shall be in accordance with the design drawings (CE-1 thru CE-2). All steel shall be painted in accordance with the requirements of NYCDOT Section 831, system "A".
5. All materials which are not supplied by Con Edison to install the conduits and manholes/boxes shall be supplied by the Contractor.

CONSTRUCTION DETAILS

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

Any required modification, detailing or alterations to the existing contract drawings shall be prepared by the Contractor and submitted to the Con Edison Field Representative for review and approval in advance of starting work.

The Contractor shall notify Con Edison of the installation schedule at least (45) days before materials are required on the site.

All materials provided by Con Edison shall be delivered to the Contractor at the construction site and unloaded by the Contractor. It shall be the Contractor's responsibility to inspect the materials immediately upon delivery. If the Contractor fails to inspect the material or accepts the material and the material is damaged, lost or deemed inappropriate, such material shall be replaced at no expense to Con Edison. In addition, all material lost, or damaged after the Contractor's inspection has been completed, shall be replaced at no additional expense to Con Edison. The Contractor shall unload all materials in such a manner as to prevent damage and shall use appropriate devices to protect pipe coatings, etc. while handling. The Contractor shall provide suitable protection from theft or damage for all materials at the construction site. Excess materials furnished by Con Edison and not used in the Work shall be returned by the Contractor to the designated Con Edison storage yard for off-loading by Con Edison personnel. All storage and maintenance of storage areas is the responsibility of the Contractor. Delivery location shall be supplied by Contractor and deemed acceptable to Con Edison Field Representative prior to schedule of delivery.

Work included under this item shall consist of the following:

- Contactor shall have an electrical competent person on site while working on or around live Con Edison facilities
- Install Con Edison provided steel conduits where shown in the plans.
- Install Con Edison provided duct plugs at the end of unoccupied conduits.
- Remove and dispose of existing conduits in the bridge construction area.
- Excavate, backfill and perform associated work including work as required to break the conduit to make entries into the existing manholes. Contractor shall coordinate with Con Edison to provide required inspections prior to entry of any Con Edison structure by Contractor Personnel.
- Remove and dispose existing manholes where shown on plans. [Note: If asbestos containing material (ACM) is encountered while working at or inside existing manholes (i.e. cable arc wrap and/or duct seal) it shall be handled and paid for under separate items. Contractor shall stop work and notify a Con Edison Field Representative if any unanticipated asbestos is encountered during construction.]

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

- Install Con Edison provided 1/4" pulling rope in each conduit terminating at each end of the conduits.
- Install new precast or field constructed manholes where shown on the plans.
- Install Contractor provided structural steel supports, including all miscellaneous support hardware as shown in contract drawings.
- Install Contractor provided wood block supports including all miscellaneous support hardware as shown on drawings or within Con Edison standard details.
- Support Con Edison forces as necessary to complete specialty work included but not limited to inspections, cable installations, splicing and cable removal.

INSTALLATION

Wood block supports assembly shall be constructed and installed by the Contractor per Con Edison drawing EO-9217-C.

Manhole/Box Construction (EO-308784, EO-10582-A, EO-2468-B, and EO-1090-B):

1. The Contractor shall install precast or field constructed concrete manholes and roof slabs where required on Con Edison reference standards. Roof slab shall be set with a minimum of 26" cover to proposed grade (unless otherwise directed) in order to clear proposed roadway pavement subbase course.
2. The Contractor shall install reinforced cast-in-place concrete chimneys (EO-10321-B), over manhole structures. The Contractor shall install Con Edison provided frame and cover per EO-10321-B, EO-1092, EO-100,271, EO-100,167, EO-13465-C, and EO-9359-C.
3. For field constructed structures, the installation shall include the breaks for duct entrances.

Conduit installation:

1. The Contractor shall install conduits with a 2" (unless otherwise indicated) separation. Conduit formation shall be in accordance with Con Edison drawing EO-7326-B.
2. Conduit and beam supports shall be installed as shown in the contract documents/drawings or as directed by the Engineer in accordance with Con Edison EO-6947-D (Welding Sleeve for Pipe Connection) and Con Edison EO-9217-C (Beam Supports).

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

3. Expansion joints shall be installed at each backwall as shown in the contract documents or as directed by the Engineer and in accordance with Con Edison EO-12171-D.
4. Concrete support blocks shall be installed behind the abutment backwall as shown in the contract documents.
5. Duct formation entering manholes shall be as directed by Con Edison.
6. All buried conduits shall have a minimum earth cover of 24". If due to subsurface conditions the earth cover is less than 24", the duct shall be plated with a 3/8" steel plate, which shall be furnished by Contractor.
7. Conduits entering manholes shall be terminated 1" beyond the inside face of the manhole wall. The edge of the conduits shall be beveled and free of all sharp edges to prevent damage to cables. All new points of entry shall be properly sealed and faced off to prevent damage to cables.
8. The conduit installation shall be in as straight alignment as possible with continuous concentric bores and flush joints to permit smooth, easy cable pulling without damage. The interior of the conduit must be free of imperfections and care shall be exercised to prevent introduction of foreign material.
9. The Contractor shall cap the end of the conduits until the cables are installed.
10. Inside all conduits, the Contractor shall install a 1/4" polypropylene rope, furnished by Con Edison, with sufficient length to extend beyond the duct ends to attach to a mandrel.

MANHOLE STRUCTURES

Demolish existing and install new precast or field constructed manholes, where shown on plans, to accommodate new conduits, including and construction of field poured concrete flairs per Con Edison drawing EO-10582-A. Concrete shall be installed in accordance with EO-1008, ACI Code, ASTM Standards, NYC DOT, NYC Building Code and rules concerning safety and health from OSHA and EPA including all required design requirements and inspections. The Contractor shall submit design mix to the Con Edison Field Representative a minimum of three weeks prior to the concrete mix being used for this project and coordinate with the Con Edison Field Representative to schedule and perform the required inspections.

EXCAVATION AND BACKFILLING TRENCH

The Contractor shall excavate and backfill the trench on both sides of the bridge approaches for installation of the electric duct system. The Contractor is to comply with code rule 753. The width and depth of the trench shall be in accordance with Con Edison drawing EO-7907-D and as directed by the Engineer. The bottom of the trench shall be graded smooth and tamped to minimize initial settlement and to avoid point support of conduits. All stones projecting into the

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

trench shall be removed from the trench bottom and the voids backfilled before conduit installation. Install sheeting and shoring as required. The contractor shall hand excavate within zone of protection of all facilities. Any facilities damaged by the Contractor shall be repaired at no additional cost to Con Edison or NYCDOT. Contractor shall restore & pave the site per NYCDOT standards or as directed by the Engineer. Contractor shall compact all backfill in accordance with project and DOT standards or at the direction of the Engineer. Any work on the sidewalk and/or pavement shall be performed in accordance with the following sections of the NYCDOT Standard Details of Construction:

Subbase Course, Hot Mix Asphalt (HMA) Pavements, Cement Concrete Foundation for Pavement, Concrete Sidewalks and Driveways:

- o H-1042A, H-1042B, H-1042C, H-1044, H-1045, and H-1042C

Since the electrical duct system is to be the property and responsibility of the Con Edison Company, the specific requirements as stipulated by Con Edison in this specification shall be met.

INSPECTION/CLEANING

In accordance with Con Edison specification EO-1063-2 the Contractor shall pass a conduit rodding device through the completed ducts to check for continuity and cleanliness. Following the conduit rodding, a mandrel preceded by a wire brush (tied to the same rope and of a size not less than the inside diameter of the conduit minus 1/4") shall be pulled through the conduit once in each direction. Con Edison shall furnish wire brush and mandrel for inspection. The Contractor shall perform the above inspection in the presence of a Con Edison Representative.

If difficulty is encountered in passage of the conduit rodding device or the mandrel, a series of wire brushes shall be drawn through the conduit, once in each direction, using a trailing line. The wire brushes shall be 1/8" less than the inside diameter of the conduit, and if this size cannot be passed through on the first attempt, the operation shall be repeated using 1/4" less than the inside diameter of the conduit until the operation is accomplished, then brush diameters shall be increased in 1/4" increments until required diameter is successfully accomplished.

If the conduit is partially or fully obstructed, the conduit shall be flushed clean by use of water from a long flushing nozzle attached to a water hose, which shall be pushed into the conduit and applied until the conduit is clear. If this procedure does not completely clear the conduit, the conduit shall be exposed and repaired.

Should the Contractor, through negligence in installing or during the cleaning operation damage any conduit, it shall be replaced with new conduit to the satisfaction of the Engineer and at no

**ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES
AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES**

additional expense to the City or Con Edison. No conduit shall be accepted unless free passage in both directions is obtained by the conduit rodding device and mandrel. Wood block supports shall be subject to inspection for conformance with specifications as to size and grade prior to treatment and following treatment for quality, retention and penetration of preservative.

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

ACCESS

Con Edison will require a four (4) to six (6) week period per feeder to install and splice the cables in the new conduits once they have been accepted under non-emergency system conditions. Scheduling this work is dependent on outage restrictions placed by the Control Centers. The Contractor shall coordinate work and incorporate all utility work in the project schedule.

The Contractor shall provide access to Con Edison crews for inspection, installation of cable, splicing and removals. Access to Con Edison facilities is required at all times in case of emergency.

The Contractor shall provide a minimum of 72 hour advanced notice of intent to enter any Con Edison Structure and coordinate required inspections by Con Edison Personnel prior to entry.

SUPPORT REQUIREMENTS

During the course of this contract the existing and/or new electric facilities may have to be supported, protected, maintained, accommodated or adjusted while installing other facilities. The existing system being supported, protected and maintained shall be on going until the new system is put into service. These electric facilities are to be supported in a manner suitable to Con Edison representatives. The Contractor shall incorporate all work related to the installation of these facilities into the project schedule and shall allow for sufficient time for Con Edison to perform all required specialty work considering outage requirements to transfer the existing electric facilities to the new duct systems.

All heavy equipment and rigging plans shall be planned and coordinated with Con Edison to ensure bearing pressure on Con Edison facilities is acceptable.

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

TESTING

The Contractor shall excavate to the dimensions required for existing manhole/box removal and new manhole/box construction; support existing utilities.

Using hand-held power tools, the Contractor shall break out and remove the existing concrete manhole/box, supporting and protecting the existing conduit and cables.

Ducts within the manhole excavation are to be exposed and carefully broken out by the Contractor in one test area and scheduled for testing by Con Edison to determine whether cables are live.

The Contractor shall supply testing of materials/concrete in accordance with NYSDOT specifications, Con Edison specifications and industry practices. Results shall be provided to the Con Edison Field Representative.

REMOVALS

Where individual conduits are determined to be abandoned, empty or contain dead cable, their removal within the manhole/box excavation and/or within the excavation for new conduit will be considered to be included under this item. Con Edison will attempt to remove existing cables after removed from service prior to removals by Contractor. Contractor shall coordinate all work with Con Edison Field Representative prior to commencing removal.

Using hand-held power tools, carefully break-out, remove and dispose of all existing precast concrete, steel, iron, plastic, wooden or other ducts within the manhole excavation designated to be maintained which contain live cables. Steel or iron conduit shall be cut by the ring and snap method and removed using approved ripping tools.

The cost of removing ducts with asbestos containing material will be paid for under separate items. The cost of removing asbestos containing material inside existing manholes will also be paid under separate items.

METHOD OF MEASUREMENT

Payment under this item shall be a lump sum bid price for the installation, support and removal of Con Edison electric conduit systems.

**ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES
AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES**

BASIS OF PAYMENT

See provision of Section "U".

The price shall cover the cost of all supervision, labor, material (except those furnished by Con Edison), equipment, maintenance of traffic, and incidentals necessary to install, relocate, support, protect, maintain, accommodate, align, adjust and remove the electric facilities without disruption of service to customers in accordance with contract documents. This bid price shall also include excavating, backfilling, sheeting, shoring, roadway plating, protective plating, and temporary and/or permanent restoration within or outside contract limits where required. The price shall include the cost of: structural supports and/or beams installed for facility support; modifying equipment, method of operation, and construction because of existing and proposed utility and city facilities; installation and removal of all proposed City facilities under, over and around electric facilities; hand excavation within the zone of protection of electric facilities; installation and removal of sheeting around facilities; and the cost of any impact with maintenance and protection of traffic. The price shall also include full and complete compensation for any and all loss of productivity, efficiency, idle time, delays, change of operation and equipment, mobilization, remobilization and demobilization, overheads, extended performance, added cost of expense, loss of profit, or other damages or impact that may be suffered by Contractor during all phases of contract work because of existing or proposed electric facilities.

Payments will not be made for any damaged materials, lost materials or the replacement of damaged materials.

Payment for all work herein specified shall be made on a one-time basis only, no payment for work herein specified shall be made for the same area more than one time.

REFERENCE DRAWINGS (use latest revisions):

EO-7907-D	Trench Excavation for Precast Concrete Conduits
EO-10864-D	Molded Plastic Plug for Conduit
EO-7326-B	Conduit Formations for 102mm (4") and 127mm (5") I.D.
EO-6947-D	Welding sleeve for pipe connection in pipe type cable system

ITEM JB-950E - INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES

EO-4796-D	Connector plate assembly for attaching bond
EO-9947-D	Adapter type 4H-4K or 5H-5K
EO-9217-C	Beam supports for conduits under bridge
EO1053	Wood Lumber and Timber Preservative Treated
EO-11320	Specification for welded joints in the fabrication of steel Structure
EO-12171-D	Expansion joint for steel pipe conduits
EO-10582-A	Field Poured Conduit Flares for Existing Cable Manholes
EO-1008	Plain and Reinforced Concrete
EO-2468-B	Cable Manhole Type M 11-6 Installation
Dwg. 308784	Precast Cable Manhole Type M 11-6 with Integral Floor
EO-16734	Test Mandrel for 4IN and 5IN Conduits
CONST-029	Public Improvement Contractor Guideline
CE-TS-4197	General Purchase Specification for Steel Pipe for Electrical Facilities and Casings
EO-100,167	Purchase Recommendation for Concrete Gravel and Concrete
EO-1063-2	Preparation of Conduit for Cable Installation
CE-1	Con Edison General Plan
CE-2	Con Edison Details

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

DESCRIPTION:

This work for Verizon shall consist of furnishing, fabricating and installing temporary supports, enclosure/support system, new split and solid telephone conduits, sleeves, fittings and appurtenances for maintaining and protecting all telephone cables to be maintained in service during all phases of rehabilitation as indicated on the contract drawings and in accordance with this specification. Support and protection shall be provided for all active cables, and will remain active, during the entire period of construction and the Contractor shall conduct his work operations to ensure that they remain in service.

The work shall include the installation, removal and disposal of temporary supports as shown on the contract plans and specified herein and/or an alternate temporary support method as may be proposed by the Contractor and approved by the Engineer and Verizon; all necessary excavations and backfilling of trenches off bridge ends including temporary protective structures; temporary fencing about temporary structures and open trenches; manual removal of existing cable encasement; installation of any required cable trough supported on temporary structure; manually moving existing cables after encasement is removed onto temporary supports prior to the demolition of the existing bridge structure and during the erection of new structures, installation of temporary spare conduits between manholes for emergency use and installation of new permanent conduits. This work shall also include the placement of the cables into split PVC ducts into final position on the completed bridge, as well as the placement of new solid PVC ducts, as shown on the contract drawings. Cable trough assembly, if required, shall enclose the existing cables and spare conduits in a protective sheath providing a continuous support for the telephone cables, air pipes and fire line.

The Contractor is expressly notified that the work for this item affects the timing of other work to be performed on this contract. He is advised to carefully investigate the relationship between this work and other work and adjust his schedule accordingly. He shall also coordinate his efforts with that of Verizon with respect to all work impacting the facilities in question. Removal and restoration of concrete sidewalk and/or roadway pavements, to include subbase, is covered and paid for under NYC Items and shall not be considered part of this item in which all work shall be considered to be performed in "unpaved areas". Temporary pavement within the limits of the trench cut line, placed to satisfy Maintenance of Traffic requirements shall be included under this item.

The contractor is notified that any New York City work bid items, when deemed appropriate by the Engineer, can also be used to pay for Verizon related work whether specifically indicated or not.

The contractor shall add Verizon New York Inc. as an "Additionally Insured" party on all insurance policies required for this contract.

The contractor shall be responsible to maintain and protect at no additional cost to Verizon all newly placed and existing cables and manholes exposed by the contractor against any unauthorized access, vandals or trespassers until the roadway is restored. Interferences with public/private utilities shall be resolved with the restoration of all Verizon facilities to "as-new" condition at no additional cost to Verizon.

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

The contractor, shall during his inspection of the site, assess and include under this item any costs associated with working near or under utilities aerial cable(s) and pole(s) including but not limited to any change(s) of operation, equipment, manning and/or reductions in productivity. The contractor shall in his bid not anticipate the removal or the relocation of aerial cable(s) or their associated poles.

The contractor shall coordinate with the Verizon field personnel to schedule regular inspections of the cables and splice cases by Verizon maintenance personnel during the entire support phase of the project until the cables and splice cases are returned to their permanent positions and accepted by Verizon.

Twenty-four (24) hours, seven (7) days per week, site access shall be required to allow emergency crews to handle cable failures or work related to this contract requiring utility crews or their appointed subcontractors. Access to the site will be required for the entire duration of the project.

The contractor shall provide 24-hour site security to ensure no damage to the Verizon facilities.

MATERIALS:

The preceding items shall be obtained after Working Drawings and Shop Drawings have been submitted by the Contractor, reviewed by Verizon and approved by the Engineer. Approved suppliers of the materials are specified and shown herein or as shown on the plans.

The Contractor shall use the proposed utility supports to support the duct system. The utility supports (angles) and connection plates are to be paid for under this item.

All materials necessary to complete the work shall be furnished by the Contractor, unless specifically noted otherwise.

The following shall be as manufactured by Americon International or approved equal:

1. Fiberglass Plates, Square and Circular Tubing
2. Fiberglass Heavy-Wall Conduits and Fittings, ASTM D2105
3. Solid 4" and 2" PVC Conduit and Fittings, Type C or Schedule 40, ASTM D1784
4. Split 4" and 2" (ID) PVC conduits, Type C or Schedule 40
5. Joint Adhesives
6. Adapters Fiberglass (IPS) to PVC
7. 2" to 4" PVC Adapters
8. Multiple Tile Duct (MTD) Adapters shall be four or six-way square to round tile adapters (plastic)
9. Conduit Watertight Expansion Plugs
10. Fiberglass Socket Expansion Joints and Stop Rings
11. Conduit spacers.
12. Pulling Eyes
13. Terminators
14. Pulling Rope, 3/8 inch diameter polypropylene
15. Manhole Inserts

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

16. Expansion Anchors

Potential Suppliers:

- American Pipe & Plastics, Inc., PO Box 577, Binghamton, NY 13902, (607) 775-2707
- American U-Tel Inc., 9760 Smith Road, Willoughby, OH 44094, (216) 946-6027
- P & C Inc., 735 South Street, Newburgh, NY 12550, (800) 782-7262

The following shall be as manufactured by A. C. Miller Concrete Products or approved equal:

1. Precast Collars, 36" diameter
2. Ladder Brackets, S-56
3. Sump frames and Covers

The following shall be as manufactured by Strongwell, Creative Pultrusions, Inc. or an approved equal:

1. Fiberglass Structural Shapes, Plates and studs, and fiber bolts/nuts/washers.

The following shall be as manufactured by Hilti or approved equal:

2. Concrete Anchors

The following shall meet the requirements of the noted Subsection of the NYS Department of Transportation Standard Specifications:

Portland Cement	701-01
Masonry Cement	701-02
Grout	701-05
Crushed stone, 1 1/2"	703-02
Mortar Sand	703-03
Concrete Sand	703-07
Common Brick	704-01
Reinforcing Bars	709-01
Wire Fabric for Concrete Structures	719-02
Admixtures	711-08
Structural Steel, A36	715-01
High Strength Bolts, nuts, washers and threaded rods, A325	715-14
Steel Pipe, ASTM A53	

The structural steel shall meet the requirements of the NYS Steel Construction Manual. All structural steel members, sleeves, bolts, nuts, washers and threaded rods shall be galvanized in accordance with Subsection 719-01 of the NYSDOT Standard Specification. Structural steel members shall be painted in accordance with the painting requirements for the bridge structural steel. All temporary structures shall receive one shop prime coat in conformance with the permanent structural steel painting requirements.

Lead Wool. As approved by the Engineer.

**HPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

Lumber. Shall meet the requirements of ASTM E84

Miscellaneous. Traffic Plates, Traffic Control Devices and Temporary Pavement as required.

Verizon will supply warning Tape.

Concrete. Shall meet the requirements of Subsection 501 of the NYSDOT Standard Specifications as follows;

Reinforced concrete for manholes - shall have a minimum $f_c = 4500$ psi at twenty-eight (28) days.
Concrete used for encasement of conduits, bends, etc. shall have a minimum $f_c = 1500$ psi at twenty-eight (28) days.

The preceding items shall be obtained after Working Drawings and Shop Drawings have been submitted by the Contractor, reviewed by Verizon and approved by the Engineer. Approved suppliers of the materials are specified and shown herein or as shown on the plans

CONSTRUCTION DETAILS:

- a) **General.** Ten (10) days prior to the start of work, the contractor shall supply the Engineer with the manufacturers' written instructions for application and use of adhesives, waterproofing and any other material required by this specification.
- b) **Notifications:** The Contractor shall notify Empire City Subway, 7 Washington Ave, Lynbrook, New York 11563, (516) 758-3750, at least fourteen (14) days in advance of planned work in order that Verizon can inspect all conduits and cables during the work. The cables will be in operation at all times. The need for any Verizon personnel must be identified to Verizon field representative seven (7) days prior to their need.
- c) **Verifications:** All existing conditions and dimensions must be field verified by the Contractor prior to submitting Working Drawings and Shop Drawings.
- d) **Entering Existing Manholes:** Methods and procedures for working in existing Verizon manholes shall be reviewed with and approved by the Verizon field representative prior to entering any Verizon manhole.

All work operations inside existing manholes must include provisions for the protection of existing cables and splice cases to the satisfaction of the Verizon field representative.

The Verizon field representative shall be contacted seventy-two (72) hours prior to entering any existing Verizon manholes. Entry into an existing Verizon manhole will require a Verizon personnel to inspect the existing cables/splice cases. Costs to repair any damage caused by the

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

contractor will be billed directly to the contractor.

All existing manholes entered by the contractor, or his representative, will be ventilated with a power blower that conforms to Verizon specifications.

All manholes shall be left clean and free of all debris.

- e) **Working Drawings.** The Contractor shall submit calculations and working drawings prepared, stamped and signed by a New York State Licensed Professional Engineer, for the proposed temporary support system which may include, but not limited to: cable trough, temporary pile bents, support beams and their bearing and anchorage systems and jacking operations required for the horizontal and vertical alignment of the cables and the cable trough. The support system drawings shall include, but need not be limited to, the following:
- Lift point locations.
 - Calculated lifting forces.
 - Details for all lifting equipment and support systems.
 - Type and grade of all materials.
 - Distance that each point is to be raised.
 - Schematic hydraulic layout.
 - All disconnections, reconnections or adjustments that are necessary to properly complete the lifting operations. This includes, but is not limited to, railings, joints, power lines, gas lines, water lines, etc.
1. Six (6) legible, standard sized (22 inches x 36 inches nominal, 21 inches x 33 1/2 inches working area) prints of each drawing, together with three (3) copies of all design computations shall be submitted to the Engineer for approval. Two (2) additional copies shall be submitted through the Engineer to Verizon for their review. Failure to submit drawings of the required size will be cause for their return without examination.
 2. The Engineer shall be allowed the longest of the following time durations to examine design computations and working drawings:
 - a. Ten (10) working days.
 - b. Two (2) working days for each drawing of a set of working drawings.
 - c. One (1) working day for every four (4) design computation sheets - any design computation sheet written on both sides to be considered as two (2) design computation sheets.
 3. All time for examination shall begin upon receipt of all pertinent information by the Engineer.
 4. The Engineer's comments shall be indicated on the returned copies. Should the proposed system not be approved, the reasons shall be indicated with the return of the material.

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

The Contractor shall then submit revised drawings for approval, subject to the same terms as the first submission. Resubmission shall not be considered a legitimate reason to request an extension of time under New York State Department of Transportation Standard Specifications Subsection 108-04B – Non-Compensable Delays

5. All work shall be done in accordance with the approved working drawings. The Contractor shall have approved working drawings prior to the start of any work.
6. The Contractor shall bear all costs or damages, which may result from the ordering of any materials or equipment or the use of any preparatory labor prior to the approval of the working drawings.

f) **Installation Details:**

1. **Structural Steel.** All structural steel work, including, but not limited to fabrication, inspection, transportation and erection shall be done in accordance with the provisions of the current NYS Steel Construction Manual.
2. **Excavation and Backfill.** All excavation and backfilling shall comply with the provisions of Section 206 of the NYSDOT Standard Specifications as follows:

The excavation shall be dewatered when necessary and kept free from water, snow and ice during construction. Special care shall be taken not to disturb the bottom of the excavation and not to remove the material at final grade until just before the structure is placed. The Contractor shall be responsible at all times for the carrying out of all excavation operations in a safe and prudent manner so that the workers, public, and adjacent public and private property will be protected from unreasonable hazard. All applicable local, State and/or Federal requirements shall be observed and necessary permits acquired by the Contractor.

The Contractor shall comply with the Contract Plans for proper securement of work zone when trenches are left open overnight and on non-work days. Sheeting shall be used in conformance with Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction (OSHA) to protect employees and to satisfactorily complete the work without causing subsidence and to prevent damage to adjacent ground and structures. These requirements are minimum standards and may have to be increased depending on field conditions or as directed by the Engineer. Instead of using sheeting, the Contractor may with written approval from the Engineer, open the excavation with the sides sloped to a stable slope not steeper than that allowed by OSHA. Taking this option, however, does not relieve the Contractor of his responsibilities as stated herein. Where the Contractor is permitted to do this, the materials used and method of construction outside the payment lines shall be the same as those required for adjacent zones within the payment lines.

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

When excavation is required for the installation of conduits, the Contractor shall notify the Engineer upon completion of the excavation. No conduit shall be placed in the excavation until the Engineer has approved the depth and cross-section. Costs to include all dewatering, where necessary.

Conduit trench bases shall be smooth and free of any vertical projections larger than three (3) inches. Conduit shall be placed on a compacted bed of four (4) inches of sand with spacers to maintain two (2) inches spacing horizontally and vertically between each conduit. Twelve (12) inches of sand shall be placed over the conduits. Warning tape shall be placed on top of the sand fill.

All trenches shall be backfilled or steel plated at the end of each day. Steel plates shall be spiked and ramped to secure their location and to minimize tripping hazards where the excavation will be exposed to the public and/or traffic. Contractor shall be responsible for the proper disposal of all spoils and discharged water from trenching operations and/or the pumping of existing Verizon manholes.

For waterproofing of manhole in place, the excavation must be of a sufficient length and width to allow the placement of waterproof coating to the exterior, including the roof.

3. **Placement of Concrete.** All concrete placement shall be in accordance with the applicable requirements of the following Subsections of the NYS Department of Transportation Specifications:
555-3.02, 555-3.03A, 555-3.04, 555-3.06, 555-3.07, 555-3.08 and 555-3.09.
4. **Demolition of Existing Manhole.** Where existing manhole containing active cables is to be demolished, the location will be shown on the contract drawings. The existing active cables must be temporarily supported until completion of the installation of the new manholes.

Where indicated all demolished manhole shall be replaced with cast-in-place reinforced concrete manholes of the same interior volume.

All exposed cables and splice cases shall be provided with a single watertight protective box system - using fire retardant wood having a flame spread of twenty-five (25) or less when tested in accordance with ASTM E84. The box system shall be built with a removable watertight top or hatch, to allow safe and adequate access to the cables by Verizon personnel. The box system around existing splice cases shall be similar in dimension/volume to the demolished manhole. Attachment of cable support/racks to the walls of the temporary structure shall be consistent with those found in the original manhole. Shop drawings detailing the method of support, including structural members, will be required.

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

Immediately upon exposure of cables, Verizon personnel shall inspect all cables for damage or air leaks. Lead sheathed cables will require encasement by Verizon personnel, utilizing heat shrink. The contractor shall anticipate having Verizon personnel and equipment on site, during normal working hours, performing this operation. Breaking out of manholes containing active cables shall be done utilizing methods to insure that no cables or splice cases will be damaged.

Prior to the removal of the manhole roof, plywood and bracing of sufficient strength to absorb the shock and weight of falling demolished material shall be placed above the cables and splice cases.

Once the roof is removed, the cables and splice cases must be shifted from the racks to an approved temporary support - designed and supplied by the contractor. This operation must be performed only by Verizon maintenance personnel. Adequate access and time must be anticipated. Once this has been accomplished, to the satisfaction of the Verizon field representative, the manhole walls and floors can be removed, exercising due diligence to protect the cables and splice cases. At this point, the contractor shall be prepared to stop work in this area to allow Verizon maintenance personnel the time to check the cables and splice cases for damage and to repair any damage and to place heat shrink around lead sheathed cables.

g) Maintenance and Protection of Existing Cables:

- 1. General.** The existing cables, fire line and air pipes shall be maintained in service and protected during all stages of the project.

The Contractor shall break out the cables from their duct enclosures and simultaneously must ensure that all of the cables remain in service. Methods for manual removal of concrete encasement and ducts from around the existing cable shall be limited to hammers of five (5) pounds or less and chisel point bits.

All fiber optic cables and or air pipes found in ducts shall be immediately placed, after being broken out from the outer conduit and independent of the support method used, into a protective cable trough or split PVC conduits and tied back into the original duct formation. The cables shall not be secured to each other. All cables in PVC conduits not encased in concrete shall remain in the PVC conduits for the duration of the temporary support. Fiber optic cables found in inner duct shall not be removed from the inner duct.

The Contractor shall support the existing cables as shown on the contract plans or as permitted by the Verizon representative.

Temporary supports of conduits/cables shall provide for the continuous support of the conduits/cables unless directed otherwise by the Verizon representative. Shop drawings showing the method of support shall be submitted for approval.

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

The cables shall be covered and protected at all times unless the nature of the work requires that they be exposed.

Where indicated on the contract drawings all cables exposed both on and off of the bridge shall be protected with a fire retarded wooden box system meeting the requirements of ASTM D2898 and have a flame spread of twenty-five (25) or less when tested in accordance with ASTM E84. All timbers shall be labeled with an N.F.P.A. seal. All work will be performed to the satisfaction of the Verizon representative. Immediately upon exposure, all cables shall be inspected by Verizon personnel for damage or air leaks.

2. **In Approaches.** All cables in the approaches will be covered in split PVC conduits.
3. **On Bridge.** Prior to removing the sidewalk or bridge deck the Contractor shall determine the depth of the Verizon ducts at eighteen (18) feet intervals, starting at the abutment walls, utilizing hand methods agreeable to the Verizon representative. The sidewalk or bridge deck can then be broken out utilizing hand held air hammers with spade tips only. The existing cables, fire line and air pipes shall be relocated from their existing location once their duct and duct encasement has been removed, and placed in the temporary support to be installed on the bridge. Movement of the cables shall be limited to the "available slack".
The Contractor shall coordinate the removal of the cables from their encasement and installation of the temporary support as shown on the contract plans.

Inspection. Access must be provided for Verizon Splicing Department to inspect the cables prior to the installation into split PVC conduits or cable trough. Lead sheathed cables will need to be encased within plastic heat shrink. Adequate time and work area shall be provided to Verizon personnel to accomplish this task. After all cables and conduits are in their final permanent position they shall again be inspected for continuity and cleanliness, and field tested, after which cover to split PVC or trough can be installed and sealed.

h) Temporary and Permanent Support

1. **In Approaches.** Temporary support of conduits/cables shall be provided for unless directed otherwise by the Verizon representative. Shop drawings showing the method of support shall be submitted for approval. Provisions for emergency access to the cables shall be provided. Support methods shall also take into account the need to work on the structure below and to place and compact the backfill below the conduits while minimizing any movement/shifting of the conduits/cables.

PVC conduits (split and solid) shall have all joints thoroughly cleaned with a PVC cleaning solution and cemented with PVC duct cement. Split duct PVC conduits shall extend to the limits as determined by the Engineer in the field where they will be joined to the existing

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

conduits by means of prefabricated adapters if conduits to be joined are of different shapes or sizes.

Once cables/inner ducts are placed in their final alignment split PVC conduit shall be placed around them. Split conduit shall be staggered top to bottom by one-half a section length, with plastic bands to be drawn hand tight around the split PVC at a maximum spacing of twenty-four (24) inches and no more than six (6) inches from each connection sleeve on either side of the joint. All restored conduit and/or trays shall be tied back into the existing system utilizing adapters, either single or multiple, or in the case of trays, custom flared transition sections sized to fit the existing conduit formation to the satisfaction of the Verizon field representative.

The excavation for the conduit shall be properly backfilled in accordance with Section 203-3.15 of the NYSDOT Standard Specifications.

In the final permanent position, a three (3) inches minimum encasement of concrete shall be placed around the split PVC conduits and the adapters to existing conduits. Encasement shall terminate eighteen (18) inches beyond the end of the adapters.

2. **On Bridge.** The type of temporary enclosure which will eventually be incorporated into the permanent structure, either fiberglass tray, split fiberglass conduits or split PVC conduits, shall be as shown on the contract drawings.

Installation Requirements:

- I. **Cable Troughs.** Troughs and hangers shall be temporarily and then permanently supported as indicated on the contract drawing. The permanent position of the trough shall continue beyond the abutments, passing through sleeves inserted in the backwall. The trough transition is indicated on the contract drawings. The cable trough shall be supported temporarily during the bridge demolition phase as shown on the plans. The Verizon personnel shall inspect all of the exposed cables prior to the cables being placed in the trough. The Contractor shall support the cable trough and cables during demolition and reconstruction operations with the support system as shown on the contract drawings. The cable trough shall follow the proposed profile of the roadway directly above each support location. Wood planking and blocking can be used to temporarily support the trough. The telephone cables shall be laid on the bottom of the trough, after which time the cover shall be installed and all joints caulked. Once the support systems are installed, the trough shall be hung from them. The Contractor shall adjust the vertical profile of the trough for the dead load deflections of the support system. The trough shall remain suspended until the final trough supports are installed, at which time the trough can be seated on its final supports and the temporary support system and hanger assemblies removed. The trough shall be anchored to the new steel utility supports. Trough flares in contact with the soil shall be

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

watertight. Caulking of trough covers shall only take place after final inspection of telephone cables in accordance with Section - *Inspection*. Trough shall be grouted into split steel sleeves in the abutment backwall. Beyond the trough transition the cables shall be enclosed in split PVC conduits (2 or 4 inches dia.). All connections shall be made watertight.

- II. **Temporary Structure.** The temporary structure, such as pile bents, for the support of the temporary cable support shall be located and aligned in accordance with the contract plans. The Contractor shall ensure that the structure and fiberglass trough do not interfere with the cables, manholes, other utilities and facilities and the existing abutment footings.

The trough shall be supported on the support system following its final profile line. Vertical and horizontal alignment adjustments will be completed during later demolition and reconstruction procedures. Movement of the support system will be limited to the available "slack" in Verizon cables as recommended by Verizon representative. Excessive movement of the cables, trough or temporary structure shall not be anticipated.

The contractor will be responsible for coordinating the manner and method of crossings for public and/or private utilities with the Verizon representative and the affected utility. The support system shall be jacked horizontally and vertically and secured in a temporary position during the removal of existing abutments. The Contractor shall exercise care in handling and moving exposed cables so that no tension and/or sharp bends occur.

The bridge superstructure shall then be installed followed by final adjustments to the trough. The support system shall be removed, after which time, the trough shall be secured to the superstructure as shown on the contract plans. The trough shall be grouted into the split sleeve inserted in the abutment backwalls with non-shrink grout.

The Contractor is expressly notified that the support system is designed for its own weight, dead weight from the cables and trough, and applicable wind loads. The support system is not to be used for storage of material, as a pedestrian walkway -- either temporarily or permanently -- or for a use other than that intended in its design.

If the Contractor wishes to modify the support system from that shown on the contract plans, he shall hire a Professional Engineer, licensed in the State of New York, to design and subsequently prepare the necessary plans and specifications for its construction and to submit those plans to the Engineer and Verizon for their approval. Submissions shall be made in accordance with Section - *Construction Details* in this specification.

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

- III. **Lifting Operation.** During all phases of operation, the differential lift between any two adjacent supports on a common centerline shall not exceed one-half (1/2) inch.

The Contractor shall, at the earliest possible moment during or after each lift, safely secure the structure with shims, cribbing, bolsters or other suitable supports. Details to be used shall be shown on the working drawings.

The lifting operations shall be conducted such that the distance between fiberglass trough and the shims, cribbing, bolsters or other suitable supports do not exceed three-eighth (3/8) inch at any time.

All welding shall comply with the requirements specified in the current New York State Steel Construction Manual.

The Contractor shall notify Verizon at least fourteen (14) days in advance of the initiation of installation work, in order that they may send an observer to monitor the installation.

- IV. **Removals.** All removal work will be done in such a manner that existing working telephone facilities are not affected. All removed materials or materials required for temporary support of the ducts, including any temporary truss structures and temporary spare conduits, shall remain the property of the Contractor and shall be removed from the site after the work is completed, unless otherwise agreed to with Verizon.
- V. **Placement of Sleeves.** Sleeves for the conduits or trough passing through the abutment backwalls, shall be placed on the same centerline as the conduits or trough and grouted into place using non-shrink grout. The grout shall be injected from one side until all voids are filled. The details of the sleeves are shown on the contract drawing.
- VI. **Spare Conduits.** Solid spare fiberglass conduits shall be installed on the bridge as shown on the contract drawings and connected to existing manholes or conduits as specified on the Contract Drawings.

All conduit joints shall be cleaned prior to applying the adhesive. All manufacturer's recommendations concerning the method and manner of joining the ducts shall be followed to insure a structurally sound and watertight joint. All joints/couplings shall be installed in a staggered pattern.

The Contractor will provide expansion joints for the conduits. The expansion joints shall be placed in a staggered pattern at the fixed end of the bridge to the satisfaction of the Verizon representative. The expansion setting is shown on the contract drawings. No joints or expansion couplings shall fall within twelve (12) inches of the abutment faces.

**HPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

After passing through the abutment backwall, a minimum of thirty-six (36) inches of cover shall be maintained over new fiberglass conduits. The new fiberglass conduits on bridge are to be joined to new PVC conduits off bridge which are joined to new or existing manholes or conduits, or terminated as shown on the Contract Drawings.

3. Beyond Bridge.

- I. All new conduits beyond bridge limits that have less than twenty-four (24) inches of cover shall be encased in concrete (minimum 3 inches thick). All new conduits beyond abutment backwalls that have less than eighteen (18) inches of cover shall have three-eighths (3/8) inch steel protection plates directly above in addition to the concrete encasement. All steel protection plates shall have a minimum overlap of three (3) inches, each side.
- II. Concrete encasement of conduit(s) to extend three (3) inches above and to either side will be required for or at all bends (sweeps), adapters, changes in grade, entering or leaving manholes, passing over or under water mains, building entrances and as directed by Verizon field representative. The Contractor will be responsible for coordinating the manner and method of crossings for public and/or private utilities with the Verizon representative and the affected utility.
- III. All conduits shall be laid as called for in the Contract Drawings in either a straight line or a smooth curve with no irregularities. The number of conduit couplings shall be limited by using as many standard lengths as practical. All joints shall be tight and free of burrs. All work shall be strictly in accordance with the requirements and recommendation of the manufacturer to form a watertight joint.
- IV. Bends shall be limited to sweeps with a minimum radius of fifteen (15) feet and a maximum angle of 22½ degrees unless otherwise directed by Verizon field representative. Substitution of elbows for sweeps will not be accepted.
- V. All connection joints shall be staggered by a minimum of six (6) inches.
- VI. The Contractor will be responsible for all conduits splaying if necessary to pass over or under existing or planned public or private facilities. Method and manner of conduit splaying shall be as directed by Verizon field representative.
- VII. The Verizon field representative will supply the depth at which the conduit will leave or enter the manhole. The contractor shall confirm with the Verizon field representative as to the method and manner in which the new conduit will be brought into or out of the manhole.
- VIII. Conduits not terminating at a manhole shall be plugged.
- IX. The final layout/route of new conduits, for permanent or temporary use, shall be directed by the Verizon field representative.

i) Maintenance of Existing Facilities.

It will be the Contractor's responsibility to maintain and support buildings, foundations, retaining walls, poles, light stanchion stand, other aerial structures as well as underground

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

structures such as water, gas, sewer, fire, electric, telephone, cable TV, police and all roadways, lawns and sidewalks adjacent to or near trench as directed by the Engineer or Verizon field representative.

j) Emergency Use Conduits.

A minimum of two (2) solid 4" or 2" PVC or fiberglass conduits shall be installed on the bridge and connected to existing manholes or spare conduits as shown or specified on the Contract Drawings prior to commencing removal of existing encasement and conduits enclosing cables. The Verizon field representative shall determine the size of the emergency conduits to be constructed.

k) Test Pits.

Test pits, if required shall be at the discretion of the Engineer and shall utilize the appropriate NYC Item number for payment

l) Delivery of Verizon Provided Material.

All Verizon supplied material shall be picked up, and the excess returned to, by the contractor at a storage yard designated by the Verizon field representative. All materials furnished to and accepted by the contractor then become his responsibility to transport to and from, care for and store at a secure area.

m) Finishing and Testing of New Conduits.

All conduits are to be finished and tested on completion of backfilling but prior to pavement restoration or sealing of enclosure as follows:

- a.** A duct rodding device connected to a one-quarter ($\frac{1}{4}$) inch polypropylene rope shall be passed through each completed conduit from manhole to manhole to check for continuity and obstructions. Following the duct rodding, a mandrel, preceded by wire brush tied to the same rope and of a size not less than the inside diameter of the conduit minus one-quarter ($\frac{1}{4}$) inch, shall be pulled through the conduit once in each direction. The Contractor shall furnish the duct rodding device, wire brush, mandrel and all other materials necessary for the above-mentioned conduit inspection.
- b.** Inspection procedures shall be performed by the contractor in the presence of the Verizon representative. Final acceptance will be given when all conduits display free passage in both directions with the wire brush and mandrel as specified above. Any conduit which rejects the mandrel shall be cleared at once and the Contractor shall bear all costs to replace defective conduit.
- c.** After the acceptance of the conduits installed, conduits shall be equipped with a three-eighth ($\frac{3}{8}$) inch pull rope and capped.
- d.** Final pavement restoration shall be performed in accordance with the Contract Plans and to the satisfaction of the Engineer, the New York City Department of Transportation and

**HBPED800Q - RECONSTRUCTION OF TIDE GATE BRIDGE
OVER FLUSHING CREEK**

ITEM JB 950T – MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES

the Verizon representative.

METHOD OF MEASUREMENT:

Payment under this item shall be made according to a lump sum for the installation, protection and maintenance of Verizon facilities, as specified herein, as shown on the contract plans or as ordered by the Engineer.

BASIS OF PAYMENT:

The price will be a lump sum for Installation of New Verizon facilities and Support, Protection and Maintenance of Existing facilities and shall include the cost of all labor, materials, plant, equipment, insurance and incidentals necessary to install new facilities, maintain, protect and support the telephone conduits, cables, and manholes, and perform all work necessary to complete the work as described in this specification and as shown on the contract drawings.



Guideline Document for Public Improvement

CONST- 029 Revision Number 4

Purpose: To update the Public Improvement Contractor Guideline document for safe entry into Sub-Surface Structures and moving energized underground cables.

Revision Date: 7-30-2020 Next Revision Due Date: 7-30-2022

Supersedes Date: 6-30-2018 Revision Cycle Period: Once every 2 years

TYPE	NAME	DATE
EH&S	Glenn D. Newell	7/30/2020
Technical	Joseph Bedell, Joseph Bedell Jr. John Stefandl & Marlon Kalloo	7/30/2020
Legal	Inna Rozenberg	7/30/2020

- Summary of Changes:
1. Updated Reference Section to Include OSHA 1926 Subpart V
 2. Removed Section on Moving Energized U.G. Cables Located Inside Sub-Surface Structures. (Previously Section 4.0 in Revision 3)
 3. Updated/Revised Sections 1.4, 2.1, 2.2.2, 3.4, 3.6, 3.8, 3.9, 4.5.5, 4.7 & 4.7.1
 4. Added New Section 4.5.4 – HDPE Conduit
 5. Added New Chapter 5.0 – Breaking Out a Point of Entry (POE)

Training Requirements - N/A

DOJT/Course #, etc. Associated with this Operating Document:

None

Subject Matter Expert: Marlon Kalloo Approved Date: 7/30/2020 *M. Kalloo*

Approver Name: Theresa Kong Approved Date: 7/30/2020 *[Signature]*

Consolidated Edison Company of New York, Inc.

Guideline

For

**Safe Entry into Sub-Surface Structures
(Electrical Enclosed Space),**

Moving Energized Underground Cables

Removal of Conduit from Cables, and

Breaking Point of Entry (POE's) Into Sub-Surface Structures

Performed by

Municipal Contractors

TABLE OF CONTENTS:

1.0 – Definitions

- 1.1 - Competent Person
- 1.2 - Attendant
- 1.3 - Electrical Enclosed Space
- 1.4 - CET Specification
- 1.5 - JB Specification
- 1.6 - Public Improvement Representative
- 1.7 – Municipal Contractor
- 1.8 - Electrically Competent Qualified Municipal Contractor

2.0 - References

- 2.1 – OSHA Sections 1910.269 & 1926 Subpart V
- 2.2 - Training
 - 2.2.1 – Electrically Competent Qualified Municipal Contractor
 - 2.2.2- Municipal Contractor Employee

3.0 - Safe Entry into Sub-Surface Structures, (Electrical Enclosed Space)

- 3.1 - Purpose
- 3.2 - Application
- 3.3 - Guideline
- 3.4 - Inspection / Testing
- 3.5 - Job Briefing
- 3.6 - Attendants
- 3.7 - Hazardous Atmosphere
- 3.8 - Personal Protective Equipment
- 3.9 – Con Edison’s Personal Protective Equipment Guideline
- 3.10 - Access

4.0 - Removal of Conduit from Cables and Moving Energized Underground Cables Located Outside of Subsurface Structures

- 4.1 – Purpose
- 4.2 – Application
- 4.3 – Guideline
- 4.4 – Job Briefing
- 4.5 - Removal of Conduit from Cables
 - 4.5.1 - Pre-cast Concrete Conduit
 - 4.5.2 - Concrete Encased Conduit
 - 4.5.3 - Wooden Conduit
 - 4.5.4 – HDPE Conduit
 - 4.5.5 – Metal Conduit
- 4.6 - Visual Inspection
- 4.7 - Cable Moving Operations
 - 4.7.1 - Personal Protective Equipment

5.0 - Breaking Out a Point of Entry (POE’s) in an Electrical Enclose Space

- 5.1 – Activities Prior to creating POE’s
- 5.2 – Creation of POE Operations

1.0 Definitions

- 1.1 Competent Person-** As a general rule, a Competent Person is an individual who, by way of training and/or experience, is knowledgeable of OSHA and other applicable standards, is capable of identifying workplace hazards relating to the specific operation, and is designated by the employer with the authority to take all appropriate actions necessary to comply with all applicable standards and properly address hazards. Some OSHA standards add additional specific requirements that must be met by the Competent Person.
- 1.2 Attendant -** An authorized individual who is stationed outside a sub-surface structure or an Electrical Enclosed Space to monitor the authorized entrants and to perform duties assigned including providing assistance to individual inside the sub-surface structure or Electrical Enclosed Space.
- 1.3 Electrical Enclosed Space –** OSHA defines an Electrical Enclosed Space as a working space, such as a manhole, vault, tunnel, service box, or shaft, used for the operation and maintenance of electric power generation, transmission, and distribution lines and equipment. An Electrical Enclosed Space has a limited means of egress or entry, and is designed for periodic entry under normal operating conditions. Under normal conditions, an Electrical Enclosed Space does not contain a hazardous atmosphere, but may contain a hazardous atmosphere under abnormal conditions.
- 1.4 CET Specification –** CET Specification defining private utility work within Municipal Construction Contracts.
- 1.5 JB Specification –** Joint Bid specification defining private utility work within a NYC DDC Capital contract.
- 1.6 Public Improvement Representative -** Con Edison employee, (Inspector, Construction Representative, Chief Construction Inspector, Project Specialist, or Manager) assigned to the Public Improvement section.
- 1.7 Municipal Contractor –** Construction municipal contractor performing work for Municipal, State or other Public Agencies or Authorities.
- 1.8 Electrically Competent Qualified Municipal Contractor -** is a Municipal Contractor employee designated and documented by the Municipal Contractor employer, in writing, as the electrically competent and qualified person who, by way of training and/or experience has the skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment, can identify non-insulated conductors from insulated conductors and/or cables and has the knowledge of the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools that are required for working on or near exposed energized electrical equipment. The Electrically Competent Qualified Municipal Contractor employee is capable of identifying varying workplace electrical hazards relating to the specific operation and has the authority to take appropriate actions, as required. In order to meet the task specific qualifications of this guideline, the Electrically Competent Qualified Municipal Contractor employee must be familiar with this document and be able to demonstrate adherence.

2.0 References

2.1 **OSHA Section 1910.269 – Electric Power Generation, Transmission & Distribution & 1926 Subpart V –Electric Power Transmission and Distribution**

2.2 **Training-** The OSHA Office of Training and Education (OTE) develops, directs, oversees, manages and ensures implementation of OSHA's national training and education policies and programs in support of OSHA's strategic goals with the objective of reducing occupational hazards through direct intervention, promoting a safety and health culture through compliance assistance, cooperative programs and strong leadership and maximizing OSHA effectiveness and efficiency by strengthening capabilities and infrastructure.

All Municipal Contractor employees shall be trained in and familiar with the safety-related work practices, safety procedures, and other safety requirements in section 1910.269(a)(2) and 1926 Subpart V that pertains to the Municipal Contractor employees' respective job assignments. Municipal Contractor employees' shall also be trained in and familiar with any other safety practices, including emergency procedures, such as manhole rescue, that are not specifically addressed by this referenced section but that is related to their work and is necessary for their safety.

Con Edison manhole inspection and underground awareness training can be scheduled through the Con Edison TLC upon request of the municipal contractor. OSHA 10 certification cards and CPR / First Aid training are prerequisites.

2.2.1 Electrically Competent Qualified municipal contractors shall also be trained and competent in:

- a- The skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment
- b- The skills and techniques necessary to determine exposed live parts from other parts, (determination of non-insulated conductors from insulated conductors / cables).
- c- The knowledge of the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools that are required for working on or near exposed energized parts of electrical equipment. Generally, the Municipal Contractor will not be required to work on or near exposed/non-insulated energized parts of electrical equipment or cables. In the event special conditions exist requiring working near exposed/non insulated energized parts of electrical equipment or cables, the Municipal Contractor shall cease working and immediately contact the authorized Con Edison Inspector so that a further assessment of the condition can be evaluated, and appropriate guidance provided.
- d- The Electrically Competent Qualified Municipal Contractor employee shall determine, through regular supervision and through inspections conducted on at least an annual basis that each Municipal Contractor employee is complying with the safety-related work practices outlined in this guidance document.

2.2.2 A Municipal Contractor employee shall receive additional training (or retraining) by the Electrically Competent Municipal Contractor under any of the following conditions:

- a- If the Electrically Competent Qualified Municipal Contractor employee indicates that the Municipal Contractor employee is not complying with safety-related work practices
- b- If new technology, new types of equipment, or changes in procedures necessitate the use of safety-related work practices that are different from those which the Municipal Contractor employee would normally use
- c- If the Municipal Contractor employee must employ other safety-related work practices that are not normally used or that require modification from those stated in this guidance document

Note: OSHA requires retraining before commencing with a task that has not been performed within one year.

The required training shall be of the classroom and/or on-the-job type. The training shall establish Municipal Contractor proficiency in the work practices required and shall introduce the procedures necessary for compliance. The Electrically Competent Qualified Municipal Contractor shall certify that each Municipal Contractor employee has received the training required and retains records of this training to be supplied upon request by Con Edison.

3.0 Safe Entry into Sub-Surface Structures, (Electrical Enclosed Space)

3.1 Purpose: To establish a guideline that shall be employed for safe entry into Con Edison sub-surface structures by Municipal Contractors.

3.2 Application: Municipal Contractor personnel

3.3 Guideline: This guideline provides the requirements for practices that shall be employed for safe entry into Con Edison sub-surface structures. Municipal Contractor personnel requiring entry into Con Edison sub-surface structures shall adhere to this guideline.

3.4 Inspection/Testing

Prior to entry into a Con Edison sub-surface structure, properly trained and qualified Con Edison electrical personnel must conduct an inspection. The assessment will determine if the condition of the electrical facilities contained therein is sufficient to allow need based unrestricted access. Con Edison electrical personnel shall validate that the Con Edison sub-surface structure inspected is approved for need based unrestricted access. The Con Edison Inspector shall communicate and document to an Electrically Competent Municipal Contractor personnel any safety precautions to be taken and that the subsurface structure is safe for entry. Any condition deemed to be un-safe through this formal inspection process would preclude granting access.

An inspection must take place daily prior to Municipal Contractor entry. Once the cover is placed on the electric subsurface structure another inspection must occur prior to Municipal Contractor entry. Inspections include but are not limited to:

- 1) Testing for stray voltage by a qualified Con Edison employee or qualified Municipal Contractor employee.
- 2) Completion of atmospheric testing.
- 3) Determination that it is safe to enter the space.
- 4) A visual inspection for any abnormalities previously defined.
- 5) Communication of inspection results and hazards to the Con Edison inspectors and the municipal contractor supervisor.

3.5 Job Briefing

The Electrically Competent Qualified Municipal Contractor in charge shall conduct a job briefing with the municipal contractor's employees involved before they start the job. The briefing shall cover: the hazards associated with the job; work procedures involved; special precautions; and personal protective equipment requirements. The Electrically Competent Qualified Municipal Contractor shall instruct that all cables are to be treated as energized. Additional briefings shall be held if significant changes, which might affect the safety of the municipal contractor's employees, occur during the course of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing. A copy of the documented job briefing should be available upon request by Con Edison.

3.6 Attendants

While work is performed in a Con Edison sub-surface structure, a Municipal Contractor Attendant shall be available in the immediate vicinity to render emergency assistance. Sub-surface structure Attendants shall comply with applicable OSHA requirements.

3.7 Hazardous Atmosphere

Municipal Contractor personnel shall perform a hazardous atmosphere test before entry into any Con Edison sub-surface structure and perform continuous air monitoring in compliance with applicable OSHA requirements. Any atmospheric reading deemed to be un-safe would prohibit access to the structure. The Municipal Contractor shall immediately notify the authorized Con Edison Inspector.

3.8 Personal Protective Equipment

Municipal Contractor personnel requiring entry into Con Edison sub-surface structures shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. In addition, Con Edison is requiring that Municipal Contractor personnel assigned to work inside Con Edison sub-surface structures shall at all times wear Flame Resistant (FR) Clothing with a rating of 8 cal/cm² or HR2, a retrieval harness and that a retrieval device be on location. In addition, an atmospheric tester

must be in use continuously anytime a structure is occupied. See section 3.9 for Matrix on Con Edison's Personal Protective Equipment Guideline.

3.9 Con Edison Personal Protective Equipment Guideline

	Task	Class D Gloves	FR Clothing	FR Hood	Blast Goggles	Face Shield	Safety Glasses
1	Pavement breaking	N	N				Y
2	Breaking out concrete encased duct	Y	Y				Y
3	Moving energized primary cables that are located outside a structure while in proximity to joints	Y	Y	Y	Y		
4	Moving primary cables outside a structure (no joints involved)	Y	Y				Y
5	Moving energized secondary cables	Y	Y				Y
6	Hand excavate to locate precast ducts	N	N				Y
7	Hand excavate to locate direct buried cables	Y	Y				Y
8	Removing cable from conduit	Y	Y				Y
9	Breaking structure for POE from outside/inside	Y	Y			Y	Y
10	Breaking sub-structure walls	Y	Y				Y
11	Pulling rope within structure with energized cable	Y	Y				Y
12	Pulling rope in enclosed spaces	Y	Y				Y
13	Building a bench or platform within a subsurface structure to support or protect cables.	Y	Y				Y
14	Breaking out unknown precast electric duct	Y	Y				Y
15	Using digging bar over electric facility	Y	N				Y
16	Using digging bar over direct buried cables	Y	Y				Y
17	Using Pneumatic clay digger in vicinity of electric facility	Y	Y				Y
18	Installing forms for field-constructed subsurface structures from inside the designed footprint when connected cables are present	Y	Y				Y
19	Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present	N	N				Y
20	Installing forms for field-constructed subsurface structure prior to first energization of new cables	N	N				Y
21	Saw cutting operation	Y	N				Y
22	Hand excavate to locate cable fault	Y	Y				Y
23	Hand excavating to find service dead leg	Y	Y				Y
24	Removing underground silo	Y	Y				Y
25	Regrade	Y	N				Y
26	Build/remove shunt box w/ energized cable inside	Y	Y				Y

3.10 Access

Municipal Contractor personnel shall not climb into or out of Con Edison subsurface structures by stepping on cables or hangers.

4.0 Removal of Conduit from Cables and Moving Energized Underground Cables Located Outside of Subsurface Structures

4.1 Purpose: Establish a guideline that shall be employed by Electrically Competent Qualified Municipal Contractor personnel, meeting OSHA training requirements, when removing conduit from cables and moving Con Edison energized underground cables located outside structures.

4.2 Application: Municipal Contractor personnel

4.3 Guideline: This guideline details the requirements for practices that shall be employed when moving Con Edison energized underground cables located outside of Con Edison structures. Movement of energized cables on the Con Edison system shall be performed in accordance with the following directions. Only Electrically Competent Qualified Municipal Contractor personnel who have been trained and meet necessary OSHA requirements for moving energized underground cables and in accordance with the following directions shall perform movement of energized cables on the Con Edison system.

4.4 Job Briefing

The Electrically Competent Qualified Municipal Contractor in charge shall conduct a job briefing with the Municipal Contractor's employees involved before they start the job. The briefing shall cover: the hazards associated with the job; work procedures involved; special precautions; and personal protective equipment requirements. The Electrically Competent Qualified Municipal Contractor shall instruct that all cables are to be treated as energized. Additional briefings shall be held if significant changes, which might affect the safety of the Municipal Contractor's employees, occur during the course of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing.

4.5 Removal of Conduit from Cables

All subsurface electric cable systems and related components shall be considered energized. Caution shall always be employed whenever conduits are opened to expose the interior cable.

4.5.1- Pre-cast Concrete Conduit

- a- The conduit shall be fractured by striking the top end corner of the conduit with a 3 lb. hammer equipped with a non-conductive handle. When fracturing the conduit, all impact/chipping action shall be performed in such a manner so as to be directed across the top of the conduit away from any cable that may be inside of the conduit.
- b- A small piece of the concrete conduit shall be chipped away so that a visual examination of the interior of the conduit can be made to verify the presence of cable. All impact/chipping actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.

- c- If cable is present, concrete-chipping operations shall continue until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness $\frac{3}{4}$ ") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operations. The remainder of the conduit shall be fractured using the 3 lb. hammer equipped with a non-conductive handle. Care shall be taken so as to avoid any impact upon the cable, either by direct or indirect hammer blows.
- d- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 5.7, below.

4.5.2 - Concrete Encased Conduit

- a- The concrete encased conduit (including but not limited to pre-cast, fiber, tile, clay), shall be fractured by striking the top end corner of the conduit with a 3 lb. hammer equipped with a non-conductive handle. When fracturing the conduit, all impact/chipping action shall be performed in such a manner so as to be directed across the top of the conduit away from any cable that may be inside of the conduit.
- b- For concrete encased conduit, it may be necessary to employ a handheld cold chisel (in conjunction with the 3 lb. hammer) to remove concrete encasement. If a chisel is utilized, all impact/chipping actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.
- c- If the concrete encasement is so dense as to render the use of a hammer and handheld chisel non-effective, an 8-pound sledgehammer may be employed. If neither of these devices proves effective, the use of a pneumatic chipping hammer will be permitted. The weight/size of the pneumatic chipping hammer shall not exceed 20 lbs. When utilizing a pneumatic chipping hammer, the device shall be securely positioned and be under close operator control at all times. The tool bit used for these operations shall be chisel shaped with a minimum width of two (2") inches. All impact/chipping actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.
- d- A small piece of the concrete conduit shall be chipped away so as to permit verification of the presence of cable inside the conduit.
- e- If cable is present, concrete-chipping operations shall continue until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector

based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.

- f- After installation of the shield material has been completed, continue removal of remaining conduit and encasement, using handheld and power tools.
- g- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 5.7, below.

4.5.3 – Wood Conduit

- a- Wooden conduit shall be split using a handheld cold chisel and a 3 lb. hammer equipped with a non-conductive handle. All impact/chipping action shall be performed in such a manner so as to be directed across the top of the conduit away from the cable.
- b- The chisel shall use to create a small window in the conduit that will permit a visual inspection of the conduit interior for the presence of cable.
- c- If cable is present, wood conduit material shall continue to be removed until enough material has been removed to permit insertion of a non-conductive protective shield barrier between the conduit and cable or as directed by the authorized Con Edison Inspector based on existing field conditions. Material such as exterior grade plywood or lumber (min. thickness ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.
- d- After installation of the shield material has been completed, continue removal of remaining conduit
- e- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 5.7, below.

4.5.4 – HDPE Conduit

- a- HDPE conduit shall be split using hand tools or a handheld pneumatic rotary cutting tool. All splitting/cutting actions shall be performed in such a manner so as to be directed across the top of the duct, away from the cable.
- b- Pneumatic Rotary Cutting Tool – A pneumatic rotary cutting tool shall be used to score an access area in the surface of the conduit. Prior to application of the cutting tool to the surface of the

conduit, the depth collar on the pneumatic rotary cutting tool shall be set so that the cutting bit will penetrate approximately $\frac{3}{4}$ of the wall thickness of the conduit. After the conduit has been cut to the maximum depth allowable (such that the bit does not fully penetrate the thickness of the conduit), a 3 lb hammer shall be used to knock out the access area (window) outlined by the cutting tool. This will permit visual inspection of the conduit interior for the presence of cable.

- c- If inspection of the interior of the conduit reveals that cable is present, a non-conductive protective shield barrier shall be inserted into the conduit between the conduit and cable. This shield material shall provide protection for the cable during the remaining conduit removal operations. Material such as exterior grade plywood or lumber (min. thickness $\frac{3}{4}$ ") or suitably reinforced plastic sheet material (min. thickness 0.060" – e.g. Norplex Micarta RT504 NEMA Grade G-3) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operations.
- d- If inspection of the conduit interior does not reveal the presence of cable, the remaining conduit may be removed using the tool choices mentioned in 4.5.4.a.

4.5.5 - Metal Conduit

- a. When removing metal conduit, the Municipal Contractor should first excavate and expose a collar connecting two sections of conduit. Once the collar is accessible, split and/or cut the collar off to inspect the conduit interior for the presence of cable. If a metal conduit collar is NOT easily accessible, or found within 20 to 40 feet of open excavation, proceed to section 4.5.5.b. Note: If the work to be performed is in response to a suspected natural gas leak or in the presence of natural gas, only the use of non-powered hand tools is allowed. Further guidance will be provided by Gas Engineering.
- b. If a collar connecting two sections of conduit cannot be found, metal conduit will be split using hand tools and/or a handheld rotary cutting tool. All splitting actions will be directed across the top of the conduit, away from the cable. Note: If the work to be performed is in response to a suspected natural gas leak or in the presence of natural gas, only the use of non-powered hand tools is allowed. Further guidance will be provided by Gas Engineering.
- c. Score the outline of an access area onto the surface of the conduit. Do not fully penetrate the conduit with the tool while making this outline.
- d. Use this outline as a guide for further splitting and cutting operations that will eventually create a viewing window into the conduit.

- e. If inspection of the conduit interior reveals the presence of cable, insert a non-conductive protective barrier between the cable and conduit wall. The barrier will provide physical protection for the cable during remaining conduit removal operations. Materials including, but not limited to, exterior grade plywood, lumber, and Norplex Micarta are acceptable. After the installation of the non-conductive protective barrier, the removal of the remaining conduit may proceed using the tool choices mentioned in section 5.5.4b.
- f. If inspection of the conduit interior does not reveal the presence of cable, the remaining conduit may be removed using the tool choices mentioned in section 4.5.5b.

4.6 Visual Inspection

- a- A visual inspection of cables located outside Con Edison structures that will be moved, shall be performed by Electrically Competent Qualified Municipal Contractor personnel or the authorized Con Edison Inspector.
- b- After the conduits have been broken out (removed from the cables), the exposed cable(s) shall be inspected by the Electrically Competent Qualified Municipal Contractor personnel.
- c- The cables shall be visually inspected by the Electrically Competent Qualified Municipal Contractor personnel, and determined to be free from any of the defects that would prevent relocation. Cable(s) shall be free of cracks, tears, and evidence of oil stains, swelling, or melting of the insulation. Cables shall not have any exposed conductor.

4.7 Cable Moving Operations – Outside Structures

- a- Prior to moving any cables outside of a subsurface structure, the cables located within the associated connecting subsurface structures shall be inspected in accordance with the guideline requirements for moving cables within Con Edison sub-structures.
- b- Municipal Contractor personnel experienced in moving Con Edison cables only shall move cables.
- c- Cables shall not be moved until plastic "fair-leaders" are positioned at the duct edges to prevent chaffing damage.
- d- Synthetic web slings having a minimum width of two (2) inches shall support cables that have been removed from conduit. Slings shall be used in a basket hitch configuration.
- e- Conduits housing cables shall be supported using slings, cable, or rope. Conduits shall be supported in such manner as to maintain alignment with one another.
- f- Maximum distance between support points shall be four (4) feet.

- g- To prevent inadvertent over bending of the cables, the maximum vertical or horizontal offset between supports shall be one foot (1') for cable that is supported outside of conduit. For cable that is being moved while still installed in conduit, the conduit shall not be offset more than one foot per four-foot section of conduit.
- h- Each set of cables (cables from one duct/conduit) shall be moved individually. Cables from multiple ducts/conduits shall not be moved as a bundle.
- i- Relocation of cables shall be performed in a careful manner with the movement of cable under complete control at all times. There shall be no sudden movements of the cable or the conduit that contains cable.
- j- An observer shall be positioned so as to determine proper slack in structures and to ensure that joints remain properly supported on rack arms and specified offsets are maintained. This observation shall be performed from outside of the structure while the cable is being moved.
- k- Allowable horizontal and vertical offsets shall be determined based on applicable CET or JB item sketches and/or as directed by the authorized Con Edison Inspector.
- l- Cables shall not be permitted to fall freely from temporary supports.
- m- All cables supported by slings shall be visually inspected at the beginning and end of each work shift to ensure that no cracks, leaks, or other defects have developed.
- n- Cables shall be repositioned with care when being moved into their final position for the installation of split conduit.

4.7.1 Personal Protective Equipment

Municipal Contractor personnel moving Con Edison energized cables shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. See Section 3.9 for Matrix on Con Edison's Personal Protective Equipment Guideline.

5.0 Breaking Out a Point of Entry (POE's) in an Electrical Enclosed Space

5.1 Activities Prior to creating POE's

- 5.1.1 Prior to creating POE's, the location of all conduit and cable passing through the section of the wall shall be visually identified and protected inside structure.
- 5.1.2 If any cables are required to be moved prior to creation of a POE, they shall be moved by properly trained and qualified Con Edison electrical personnel.

5.2 Creation of POE Operations

5.2.1 Using caution, expose the exterior section of the wall that you intend to create the POE (typically done in 2' – deep vertical sections) by carefully excavating on the outside of the structure.

5.2.2 When there is a potential for contact between the existing cables that have been visually identified and the tool being used to break out the POE, protect the cables using fire rated wood, phenolic board, cable shields or other acceptable non-conductive materials. Along with protecting the cable from coming in contact with the implement being used for breaking, cables on the walls in the POE area shall also be protected from falling debris using FR wood even if there is no potential for contact with said cables.

5.2.3 Once the following conditions have been satisfied:

5.2.3.1 Location of cables inside the structure and the associated conduit outside have been verified.

5.2.3.2 Protection of cable on both the inside and the outside of the structure walls

5.2.3.3 Structural integrity of the proposed POE area has been confirmed using hand tools

Then use the appropriate tool (up to and including a 90 lb. jackhammer) to create the POE on the section of structure wall that was previously prepared.

5.2.4 If a jackhammer is being used for the POE breakout operation, where feasible, support the tool from underneath to prevent slippage.

5.2.5 Where possible, the use of a 90 lb. jackhammer shall be avoided within 8" of a live conduit. If the competent person determines that the breakout can only be made using a jackhammer within 8" of live conduit, a physical barrier must be placed between the jackhammer and all facilities that could possibly come in contact with the jackhammer. The Municipal Contractor may then begin utilizing the 90 lb. jackhammer using a 3" bit or wider.

**END OF JB-PAGES SECTION C
(NO FURTHER TEXT ON THIS PAGE)**

**SECTION D. PRIVATE UTILITIES
PARTICIPATING LIST**

LISTING OF COMPANIES NAMED FOR THIS CONTRACT

**HBPED800Q
RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK
BOROUGH OF QUEENS**

<u>COMPANY NAME</u>	<u>CONTACT NAME</u>	<u>CONTACT</u>	<u>E-MAIL</u>
CON- EDISON	DENNIS BRADY	(917) 608-3435	BRADYD@CONED.COM
VERIZON	AUBREY MAKHANLALL	(516) 758-3705	AUBREY.N.MAKHANLALL@VERIZON.COM

**END OF JB-PAGES SECTION D
(NO FURTHER TEXT ON THIS PAGE)**

SECTION E. PRIVATE UTILITIES SCOPE OF WORK

Con Edison

July 2022

HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK

Borough of Queens

Schedule JB: Scope of Work for Joint Bid Items

JB ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
JB 450.2	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	CrHrs	126
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	CrHrs	146
JB 636R	REPAIR TO UTILITY STRUCTURES	CY	24
JB 636N	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	CY	24

Con Edison**July 2022****HBPED800Q****RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK****Borough of Queens****Schedule JB: Scope of Work for Joint Bid Items**

JB 450.2		
CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)		
@ THE FOLLOWING LOCATIONS		
AS ENCOUNTERED OR DIRECTED BY THE CON EDISON FIELD REPRESENTATIVE		QTY(CrHrs) 126
JB 450.2	TOTAL	126
JB 450.3		
CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)		
@ THE FOLLOWING LOCATIONS		
AS ENCOUNTERED OR DIRECTED BY THE CON EDISON FIELD REPRESENTATIVE		QTY(CrHrs) 146
JB 450.3	TOTAL	146
JB 636R		
REPAIR TO UTILITY STRUCTURES		
@ THE FOLLOWING LOCATIONS		
AS ENCOUNTERED OR DIRECTED BY THE CON EDISON FIELD REPRESENTATIVE		QTY(CY) 24
JB 636R	TOTAL	24
JB 638N		
INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE		
@ THE FOLLOWING LOCATIONS		
AS ENCOUNTERED OR DIRECTED BY THE CON EDISON FIELD REPRESENTATIVE		QTY(CY) 24
JB 638N	TOTAL	24

Con Edison

July 2022

**CON EDISON JOINT BIDDING SCOPE OF WORK
CITY BID SPECIALY ITEMS ESTIMATE QUANTITIES FOR INCLUSION IN
HBPED800Q
RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK
Borough of Queens**

JB ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
JB 950E	INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING AND APPROACHES	LS	1

Verizon**June 2022**

**VERIZON JOINT BIDDING SCOPE OF WORK
CITY BID SPECIALY ITEMS ESTIMATED QUANTITIES FOR INCLUSION IN
HBPED800Q
RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK Borough of
Queens**

JB ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
JB 950T	MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES (SPECIALTY ITEM)	L.S.	1

Con Edison

July 2022

**CON EDISON JOINT BIDDING SCOPE OF WORK
 CITY BID SPECIALY ITEMS FOR INCLUSION IN
 HBPED800Q
 RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK
 Borough of Queens**

JB 950E
**INSTALLATION OF CON EDISON ELECTRIC DUCTS, MANHOLES AND APPURTENANT WORK FOR BRIDGE CROSSING
 AND APPROACHES**

@ THE FOLLOWING LOCATIONS

AS ENCOUNTERED OR DIRECTED BY THE CON EDISON FIELD REPRESENTATIVE

QTY(LS)
1

JB 950E

TOTAL

1

**END OF JB-PAGES SECTION E
(NO FURTHER TEXT ON THIS PAGE)**

Verizon

June 2022

VERIZON JOINT BIDDING SCOPE OF WORK
CITY BID SPECIALY ITEMS FOR INCLUSION IN
HBPED800Q
RECONSTRUCTION OF TIDE GATE BRIDGE OVER FLUSHING CREEK Borough of
Queens

JB 950T

MAINTENANCE, PROTECTION & INSTALLATION OF VERIZON FACILITIES (SPECIALTY ITEM)

@ THE FOLLOWING LOCATIONS

AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE

QTY(L.S.)
1

JB 950T

TOTAL 1

**SECTION F. PRIVATE UTILITIES TEST
PITS AND SKETCHES**

JB-F1

**END OF JB-PAGES SECTION F
(NO FURTHER TEXT ON THIS PAGE)**

SECTION G. PRIVATE UTILITY DRAWING LIST

UTILITY DRAWING LIST

GENERAL:

DRAWING TITLE	DRAWING NO.	NO. OF SHEETS
GENERAL NOTES AND CONDITIONS FOR UTILITY WORK	JB-G1	1

CON EDISON:

DRAWING TITLE	DRAWING NO.	NO. OF SHEETS
CON EDISON ELECTRIC CONDUIT INSTALLATION PLAN	JB-G2	1

VERIZON:

DRAWING TITLE	DRAWING NO.	NO. OF SHEETS
VERIZON CONDUIT PLAN	JB-G3	1
TELECOMMUNICATIONS NOTES & DETAILS	JB-G4	1

TOTAL NUMBER OF DRAWINGS ATTACHED IS (4)

**END OF JB-PAGES SECTION G
(NO FURTHER TEXT ON THIS PAGE)**

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

01/20/2023

ADDENDUM No. # 1

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85023B0030-HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Please refer to Attachment C for revised M/WBE goals.**

2. **Bidders Questions and Responses to Questions:**
Attachment A is included with this Addendum.

3. **Revisions to Documents:**
Attachment B is included with this Addendum.

4. **Revisions to PASSPort forms:**
Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled “Transferring Data Between Rounds of an RFX” has been added to the Documents section of the View RFX tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-1041 or by email at CSB_projectinquiries@ddc.nyc.gov.

Richard Jones, PE CWI CDT
Executive Director, Specifications

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS
ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	Drawing C-9 calls out "Replace the existing 2" tap valve box with the chamber". Please clarify what bid item this will be paid under.	<i>The applicable item numbers are listed on the same drawing C-9 in the table at the bottom left.</i>

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF
QUEENS

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

Plan Holder List added.

Vendor

CAC INDUSTRIES INC
DIFAZIO INFRASTRUCTURE- DIFAZIO INDUSTRIES JV
E-Gill Rebar
FINEST MATERIALS LLC
HELLMAN ELECTRIC LLC
JLJ IV ENTERPRISES INC
JR CRUZ CORP
LIRIANO & ASSOCIATES ENGINEERING CONSULTING SERVICES PLLC
MAVEN CONSTRUCTION CORP
MLJ Contracting Corp
OLIVEIRA CONTRACTING INC
PAUL J. SCARIANO INC
PERFETTO CONTRACTING CORP
RESTANI CONSTRUCTION CORP
The Lane Construction Corporation
TRANSIT CONSTRUCTION CORP.
TRIUMPH CONSTRUCTION CORP

Telephone Email

7187293600 mcapasso@cacindinc.com
7187206966 john@difazioind.net
8455598659 eileen@e-gillrebar.com
6072208693 FINESTMATIERALSLLC@GMAIL.COM
7189319900 slazzaro@hellmanelectric.com
7184655600 jjuliano@jljiv.com
7322900700 ecruz@jracruz.com

7184254327 cristian.liriano@lirianoengineering.com

7184188800 jacek@mavenconst.com
7185719599 tiovino@iovinoent.com
5163336343 coliveira@oliveiracontracting.com
9146239200 pscariano@ipjs.com
7188588600 cperfetto@perfettocontracting.com
7187280870 srestivo@restani.com
2032353351 nyc_botella@laneconstruct.com
9144760465 wmascetta@transitcorp.com
7188616060 ccuzzi@triumphconstructionny.com

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH
OF QUEENS

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

Bid Schedule:

1. Changed Bid Schedule:
 - Item 7.88 AD Price Not Less (PNL) value of \$111.00 was changed to \$75.00.
2. Updated JB Specialty Bid Schedule adding “Price Not Less”.

Setup Changes:

“M/WBE PARTICIPATION GOAL” revised as follows:

Black American:	11%
Hispanic American:	3%
Unspecified:	2%

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

01/27/2023

ADDENDUM No. # 2

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85023B0030-HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bid Date changed from February 1, 2023 to February 10, 2023.**
2. **Bidders Questions and Responses to Questions:**
Attachment A is included with this Addendum.
3. **Revisions to Documents:**
Attachment B is included with this Addendum.
4. **Revisions to PASSPort forms:**
Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFX tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-1041 or by email at CSB_projectinquiries@ddc.nyc.gov.

Richard Jones, PE CWI CDT
Executive Director, Specifications

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS
ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF
QUEENS

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH
OF QUEENS

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum is included within Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

Bid Schedule:

None

Setup Changes:

“M/WBE PARTICIPATION GOAL” revised as follows:

Unspecified: 23%

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/08/2023

ADDENDUM No. # 3

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85023B0030-HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **The Bid Opening for the contract described below scheduled for February 10, 2023, at 11:30 AM is rescheduled to February 17, 2023, at 11:30 AM.**
2. **Bidders Questions and Responses to Questions:**
No Attachment A is included with this Addendum.
3. **Revisions to Documents:**
No Attachment B is included with this Addendum.
4. **Revisions to PASSPort forms:**
No Attachment C is included with this Addendum

Transferring Data Between Rounds of an RFX: A new document titled "Transferring Data Between Rounds of an RFX" has been added to the Documents section of the View RFX tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-1041 or by email at CSB_projectinquiries@ddc.nyc.gov.



Digitally signed by Richard
Jones, PE CWI CDT
Date: 2023.02.08 08:26:47-05'00'

Richard Jones, PE CWI CDT
Executive Director, Specifications

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS
ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None.

PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF
QUEENS

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None.

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH
OF QUEENS

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum is included within Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

None.

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/14/2023

ADDENDUM No. # 4

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85023B0030-HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **The Bid Date is hereby postponed to 2/21/2023.**
2. **Bidders Questions and Responses to Questions:**
Attachment A is included with this Addendum.
3. **Revisions to Documents:**
No Attachment B is included with this Addendum.
4. **Revisions to PASSPort forms:**
Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled “Transferring Data Between Rounds of an RFX” has been added to the Documents section of the View RFX tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

DDC strongly advises vendors to finalize and submit bids 48 hours prior to due date and time. The City is not responsible for technical issues (e.g. internet connection, power outages, technology malfunction, computer errors, etc.) related to bid submissions.

If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-1041 or by email at CSB_projectinquiries@ddc.nyc.gov.

Richard Jones, PE CWI CDT
Executive Director, Specifications

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	What work should be included in item 6.27- Demolition of structures-1 LS	See drawing S-103.
2	Drawing GEN-4. Note 7.01 says that the contractor shall provide security measures for the staging area and work sites. Is it necessary to have security guards on site? Or having cameras is good enough?	Security guards are required.
3	Please elaborate on Insurance Requirement of Marine Pollution Liability – is this shorthand for Marine VESSEL Pollution Liability, (the other marine coverages Hull / P& listed in the cells above aren't checked). We will not be operating a vessel.	Please refer to the referenced Article 22.1.6 of the Standard Construction Contract.
4	Please confirm the following for items E260543 A and E260543 B: a. The items do not include the conduit and wire. b. The quantity is for the entire length of the ductbanks not just the length under the roadway. c. The 1" conduit associated with these items is RGS.	1.a. Confirmed. b. The length listed is the entire length, not just under the roadway. c. Confirmed
5	The quantities for Sluice gate conduit and wire appear to be extremely low if wire and conduit is not included under the ductbank items E260543 A and E260543 B. there is only 45' if item E 260519 #6 conductor. There are nine #6 conductors to be installed through the ductbank from the electrical platform to the pumps. The ductbank alone is 200'. There are similar situations for the other wire items. Please correct the wire quantities.	See addendum for revised quantities on Bid Schedule.
6	The light fixtures on the platform are included under item E 260529. What are the pay items for the switch, receptacle, and the conduit/wire for the lighting/switch & receptacle?	See items E 260533 A1.0, E260519 F, and E2603600 for conduit, wire, receptacle, switch etc. For platform lighting, see item SL-22.16.05
7	Please clarify if/what the MPT Stipulations for this project are or where they can be found.	Project falls within Parks property and it does not need OCMC's permit. Contractor is advised to work with Engineer and NYCDPR to coordinate for any events that may take place nearby. Bidders are advised to see the MPT drawings from MPT-101 to MPT 102, MPT 201 to MPT 204 and MPT 301 to MPT302

8	<p>a-There are two different Bid Schedule on Passport which are labeled as the Bid Schedule and Bid Schedule for JB Specialty Items respectively. Item number JB 950T on second bid schedule shall not be less than \$100,000.00 and it will be paid under JB-FS-VZ item on first bid schedule. However, item number JB-FS-VZ under first Bid schedule is fixed price item and it is \$99,820.00. Please clarify.</p> <p>b- In addition, JB-FS-CE is a Fixed Price item on Main Bid schedule. Second bid schedule says that JB 950 E will be paid under JB-FS-CE item and unit bid price cannot be less than \$380,000.00 But the subject item is already a fixed price item on first bid schedule. Please explain the purpose of second bid schedule.</p>	<p>Items shown on the JB Specialty Bid Schedule will be paid via the JB Fixed Sum items. The JB Fixed Sum will also be used to pay for other joint bid work, such as the Price List scope shown in the JB-Pages, Section E.</p>
9	<p>a. Bid quantity for item number 565.2032 is 28 each. However, the bearing quantity on the table at Drawing no S-508 is 35 each. Please clarify.</p> <p>b. Please verify quantity of item 564.510001, I'm getting far less than the Bid Item Quantity.</p> <p>c. Please verify quantity of item 564.510002, I'm getting far less than the Bid Item Quantity.</p>	<p>a- Bid Schedule revised; please see Attachment C.</p> <p>b- Bid Schedule quantity remains unchanged.</p> <p>c- Bid Schedule quantity remains unchanged.</p>
10	<p>Are these bearings must be painted with a three coats system?</p>	<p>All metal parts of bearings must be painted with three coats system.</p>
11	<p>There is no information or drawings regarding on item number 6.27-Demolition of Structures. What is this item for?</p>	<p>See drawing S-103.</p>
12	<p>Would the "Reconstruction of tide gate bridge" project you are providing plans for require a wheel washing station or some variation of a Storm Water Pollution Prevention Plan (SWPPP)?</p>	<p>Contractor to prepare required documents for SWPPP and get its permit from regulatory agencies, paid under Item 9.30.</p>
13	<p>Specific Traffic Stipulation have only 2 notes. In addition, Drawings has Detouring plan. However, we did not see an information on full closure restrictions. Can we close the bridge to pedestrian and vehicular traffic during daytime or nighttime? Please clarify.</p>	<p>Project will be completed in stages as shown on MPT drawings without full closure. Detour plans are added in case any extra traffics needed to be detoured during special events required by NYCDPR or NYPD. See the MPT drawings from MPT-101 to MPT 102, MPT 201 to MPT 204 and MPT 301 to MPT302</p>

14	<p>Regarding Drawing C-1 97/125 Note 4 that vibration monitoring needs to be conducted for the historical structure at the northwest quadrant of the bridge, but the vibration monitoring section in the project specifications does not mention this structure.</p> <p>A) Please clarify if vibration monitoring is required in this structure. B) If vibration monitoring is required for the historical structure, please give more information about the structure.</p>	<p>Refer to note 16.03 on drawing Gen-3 that talks about the vibration monitoring of historical structure. Monitoring of this structure is required. The concrete structure is a remnant of the old switchyard, which is currently not in use.</p>
15	<p>Regarding Section 9.71 WBB vibration monitoring of existing structures the specs list the following for vibration monitoring locations:</p> <p>a) Section 1. Existing bridge before demolition, existing bridge substructure during staged construction and new bridge structure including the existing subaquatic water main and the existing sewer structures. Are there any drawings that show the location of this subaquatic water main and the existing sewer structures that they want monitored?</p> <p>b) Section 5. Item7. states that the monitoring plan should show the location of the vibration monitoring points along "Step Street and the adjacent buildings to be monitored" and goes on to state the vibration readings must be observed at locations along the existing wall - The Step Street looks far from this site and please explain "along the existing wall" what is reference to</p>	<p>a) The existing watermain is shown on several drawings. See plans, elevations, and sections as well as utility drawings. Sewers are shown on utility drawings as well.</p> <p>b) Disregard item 7 under SECTION 9.71WBB.5.</p>
16	<p>Regarding the deck pour drawings S-207/sht. 28, S-509/sht. 60, and S-510/sht. 61. They don't show a deck closure pour. You need a deck closure pour to join the two decks together. The stringers under the previously poured deck are in the loaded position. So, the two sides are at different elevation. You won't be able to splice the mechanical couplers at the deck construction join. Please clarify the deck pours sequency and include a closure pour.</p>	<p>The current design doesn't use closure pour to minimize the number of longitudinal joints and future maintenance issues. The dead load deflections are not significant (see drawings S-505 and S-506). The closure pour is an option that the contractor may submit for approval during shop drawings review phase as the method of construction that better fits his means and methods.</p>
17	<p>Please Provide As-Built Drawings of existing bridge</p>	<p>Required info related to existing bridge and its plans, elevations, sections, and other details are shown on structural drawings. For more info, see drawings S-101 through S-109, and S-201 through S-207.</p>

18	Span 2, 3, 4 and Span 6, 7, 8 are continuous spans. There is no concrete pouring sequence for deck slab indicated on contract drawings. Is this going to be continuous pouring or checkerboard pouring? Please clarify	Assume sequential (not continuous) concrete placement. The exact sequence will be a subject to review and approval during shop drawing review phase.
19	Drawing S-510 & S-511 shows the Proposed Deck Slab. However, the detail does not show closure pour between the stages. Please note that, during construction of Stage 2, stringers at stage 1 under the deck will be in loaded position and stage 2 stringers will be in unloaded position. This will affect erection of stage line diaphragms and mechanical couplers. Please Clarify and introduce closure pour.	The current design doesn't use closure pour to minimize the number of longitudinal joints and future maintenance issues. The dead load deflections are not significant (see drawings S-505 and S-506). The closure pour is an option that the contractor may submit for approval during shop drawings review phase as the method of construction that better fits his means and methods.
20	Are Fascia Concrete beams structurally supporting the deck above or they are just architectural beam?	The deck overhangs are designed to carry the load without support on fascia beams. The fascia beams are structural beams designed to carry various vertical and horizontal loads
21	Please provide the depth for existing storm sewers – relevant to build the Type A-1 MH on the existing pipe on drawing C-9/ 107 of 125. If you don't have the information, can we assume a depth not to exceed 10' for bidding purposes?	The depth of existing sewers can be assumed less than 10 feet.
22	I saw The Department of Design and Construction's ownership of the Reconstruction of tide gate bridge project with the number of HBPED800Q / EPIN: 85023B0030. We provide wheelwash equipment used to prevent disturbed soil from being tracked out onto public roadways. I assumed since this construction project is on a costal waterway we would have a BMP (best management practice) for the SWPPP (stormwater pollution prevention plan). What would be the stormwater pollution prevention plan for this project if there is one?	See answer to question number 12 above.
23	Due to the complexity of this project, we respectfully request an additional time extension of 4 (4) weeks to allow time for a more competitive and complete Bid Proposal to be submitted. We would like to get a time extension also for sending request for information (RFIs).	Bid Date is postponed to 2/21/23.

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF
QUEENS

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None.

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH
OF QUEENS

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 3 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

1. Bid Schedule has been revised.
2. Bid Submission Form revised.

Item Grid

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: March 3, 2023; between 8:30 AM and 11:00 AM
 BID OPENING DATE/ TIME: March 3, 2023; 11:30 AM

PROJECT No. : HBPED800Q

TITLE: **RECONSTRUCTION OF TIDE GATE BRIDGE, BOROUGH OF QUEENS**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY:	
			SPECS UNIT	GENERAL COUNSEL
#1 Questions from Bidders and Responses to Questions; Revisions to the documents; Revisions to PASSPort forms.		01/20/2023		
#2 Revised Bid Date Revisions to PASSPort forms. Revised Bid Date (02/17/2017)		01/27/2023		
#3 Revised Bid Date (02/17/2017)		02/08/2023		
#4 Questions from Bidders and Responses to Questions; Revisions to PASSPort forms. Revised Bid Date		02/14/2023		
#5 Revised Bid Date		02/16/2023		

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/16/2023

ADDENDUM No. # 5

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85023B0030-HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **The Bid Date is hereby postponed to 3/3/2023.**
2. **Bidders Questions and Responses to Questions:**
No Attachment A is included with this Addendum.
3. **Revisions to Documents:**
No Attachment B is included with this Addendum.
4. **Revisions to PASSPort forms:**
No Attachment C is included with this Addendum.

Transferring Data Between Rounds of an RFX: A new document titled “Transferring Data Between Rounds of an RFX” has been added to the Documents section of the View RFX tab. Please refer to this document when an addendum has been issued. Note: Whenever an addendum is issued, the RFX item grid will be cleared. You can import the work you have already done by following the steps on this document.

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If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-1041 or by email at CSB_projectinquiries@ddc.nyc.gov.

Richard Jones, PE CWI CDT
Executive Director, Specifications

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

None

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF
QUEENS

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

None.

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH
OF QUEENS

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum is included within Round 3 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

None

Item Grid

None

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: March 3, 2023; between 8:30 AM and 11:00 AM
 BID OPENING DATE/ TIME: March 3, 2023; 11:30 AM

PROJECT No. : HBPED800Q

TITLE: **RECONSTRUCTION OF TIDE GATE BRIDGE, BOROUGH OF QUEENS**

ADDENDA ISSUED	NO. OF DWG	DATE	APPROVED BY:	
			SPECS UNIT	GENERAL COUNSEL
#1 Questions from Bidders and Responses to Questions; Revisions to the documents; Revisions to PASSPort forms.		01/20/2023		
#2 Revised Bid Date Revisions to PASSPort forms. Revised Bid Date (02/17/2017)		01/27/2023		
#3 Revised Bid Date (02/17/2017)		02/08/2023		
#4 Questions from Bidders and Responses to Questions; Revisions to PASSPort forms. Revised Bid Date		02/14/2023		
#5 Revised Bid Date		02/16/2023		
#6 Questions from Bidders and Responses to Questions; Revisions to the documents; Revisions to PASSPort forms		02/23/2023	RJ	<i>CL</i> 2/23/23

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

02/23/2023

ADDENDUM No. # 6

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85023B0030-HBPED800Q

RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

The bidder is advised that the items listed below apply to the project:

1. **Bidders Questions and Responses to Questions:**
Attachment A is included with this Addendum.

3. **Revisions to Documents:**
Attachment B is included with this Addendum.

4. **Revisions to PASSPort forms:**
No Attachment C is included with this Addendum.

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Richard Jones, PE CWI CDT
Executive Director, Specifications

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF QUEENS

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

No.	Bidders Questions	DDC Responses
1	E 409543.1.1B states "Comply with Section 40 90 10.": Please provide Specification 40 90 10	Please see Attachment B
2	Based upon our review of the staging we may be required to provide temporary power to the new Sluice gates between piers 5&6 and 7&8. a. Please confirm this is required. b. Will the contractor be permitted to use overhead cable for temporary power? c. Will the gates be required to operate off of the new control system or can they operate off the local gate controller?	This is dependent on the Contractor's means and methods.
3	Please consider revising the bid due date to Wednesday, February 22nd due to President's Day, a federally observed holiday	Please refer to Addendum 5

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH OF
QUEENS

ATTACHMENT B – REVISIONS TO THE DOCUMENTS

1. Revised Volume 3:
 - EL-Pages – Section E 409543
 - JB 4.0 Package – JB price List was revised (Change description on JB 306)

DDC PROJECT #: HBPED800Q

PROJECT NAME: RECONSTRUCTION OF TIDE GATE BRIDGE-BOROUGH
OF QUEENS

ATTACHMENT C – REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 4 of the procurement.

Please note that numbering of addenda is independent of rounds.

Questionnaire Changes:

None

Item Grid

None



**Department of
Design and
Construction**

DIVISION OF INFRASTRUCTURE

VOLUME 3 OF 3

PROJECT ID: HBPED800Q

**RECONSTRUCTION OF
TIDE GATE BRIDGE OVER FLUSHING CREEK**

BIN 2-27069-0

TOGETHER WITH ALL WORK INCIDENTAL THERETO

**BOROUGH OF QUEENS
CITY OF NEW YORK**

_____ *Contractor*

Dated _____, 20____
