

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

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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 (<u>CSB projectinquiries@ddc.nyc.gov</u>) 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 Pages1-2) 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;
- 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 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	NYC Department of Transportation ("DOT") Standard Highway Specifications,
6.XXX	as amended in the R-Pages, located in Volume 3 of 3 herein;
7.XXX	AND
8.XXX	NYC DOT Standard Details of Construction;
(Except 8.01 XXX; see below)	OR,
9.XXX	if the item is not contained within the Standard Specifications, then see the
HW-XXX	applicable New Sections in the I-Pages, located in Volume 3 of 3 herein.
	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;
1.XXX	AND
50.XXX through 55.XXX	NYC DEP Specifications for Trunk Main Work;
60.XXX through 66.XXX	AND
70.XXX through 79.XXX	NYC DEP Sewer Design Standards;
(Except 79.11XXX; see below)	AND
DSS XXX	NYC DEP Water Main Standard Drawings;
DSW XXX	OR,
	<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	New Sections in the I-Pages, located in Volume 3 of 3 herein
PM-XXX	AND
ROW XXX	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	New Sections in the I-Pages, located in Volume 3 of 3 herein.							
NYPD-XXX								
P XXX								
PK-XXX								
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	Specifications for the Specialty Electrical Works in the EL-Pages, located in							
ME XXX	Volume 3 of 3 herein.							
	NYC DOT Division of Street Lighting Specifications							
SL-XXX	AND							
	NYC Division of Street Lighting Standard Drawings.							
	NYC DOT Specifications for Traffic Signals and Intelligent Transportation Systems							
T-XXX	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.							

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.

BID SUBMISSION FORM

Bidder Name: Procurement Title:	Tater LaPeruta TV 85024B0016-SANDHWSIB - RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND							
RFx Name:	85024B0016-SANDHWSIB -RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND							
The above-named bidde	r affirms and declares:							
the above procu 2. Any discrepancy Form and the bithe agency finds	completed and submitted all required information for rement in the PASSPort system; y between the bid price listed on this Bid Submission d information submitted in PASSPort may result in ng the bid non-responsive; and g submitted in accordance with New York State pal Law § 103. \$ 3,337,455.84							
	Bidder Signature							
EIN (if applicable):	47-139/529 (EIN must match the EIN of the entity that submitted bid information in							
Bidder Name:	Tater Culeruta TV							
Ву:	Michael Motins							
	(Name of Partner of Corporate Officer)							

(Signature of Partner of Corporate Officer)

Signature:



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

Project ID: SANDHWSIB ePIN: 85024B0016

TOTAL BID PRICE: \$3,337,455.84

Ten Number Rein Description Figure of Settings o	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8
2 10.24 of				Estimate of Quantity				Price Criteria
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4 4.02 CB ASPHANTIC CONCRETE MATURE	2 4	.02 AG	ASPHALTIC CONCRETE WEARING COURSE, 3" THICK			50.00	\$28,750.00	
S	3 4	.02 CA	BINDER MIXTURE			150.00	\$18,000.00	
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10 13 14 18 18 17 17 18 18 18 18	8 4	.08 BA	CONCRETE CURB (21" DEEP)	380.00	L.F.	95.00	\$36,100.00	
11 4.13 BAS 7" CONCRETE SIDEWALE (UNPROMENTED) 270.00 5.1. 5.0 5.270.00 5.1 12.4 51TE ENFORCEMENT BAS 6,000 0 15. 5.300.00 5.1 5.00 5.300.00 5.1 5.00	9 4	.11 CA	FILL, PLACE MEASUREMENT	250.00	C.Y.	65.00	\$16,250.00	
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43 53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS 215.00 L.F. 15.00 \$3,225.00 44 6.01 AC CLEARING AND GRUBBING 660.00 S.Y. 10.00 \$6,600.00 45 6.02 AAN UNCLASSIFIED EXCAVATION 315.00 C.Y. 85.00 \$26,775.00 46 6.02 PA PNEUMATIC EXCAVATION AROUND TREES 20.00 C.Y. 150.00 \$3,000.00 47 6.20 BROKEN STONE BALLAST 30.00 C.Y. 42.50 \$1,275.00 Unit price bid shall not be less than: \$42.50 48 6.25 RS TEMPORARY SIGNS 484.00 S.F. 1.00 \$484.00 49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84						4		
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45 6.02 AAN UNCLASSIFIED EXCAVATION 315.00 C.Y. 85.00 \$26,775.00 46 6.02 PA PNEUMATIC EXCAVATION AROUND TREES 20.00 C.Y. 150.00 \$3,000.00 47 6.20 BROKEN STONE BALLAST 30.00 C.Y. 42.50 \$1,275.00 Unit price bid shall not be less than: \$42.50 48 6.25 RS TEMPORARY SIGNS 484.00 S.F. 1.00 \$484.00 49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84						15.00		
46 6.02 PA PNEUMATIC EXCAVATION AROUND TREES 20.00 C.Y. 150.00 \$3,000.00 47 6.20 BROKEN STONE BALLAST 30.00 C.Y. 42.50 \$1,275.00 Unit price bid shall not be less than: \$42.50 48 6.25 RS TEMPORARY SIGNS 484.00 S.F. 1.00 \$484.00 49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84	44 6	.01 AC	CLEARING AND GRUBBING			10.00	\$6,600.00	
47 6.20 BROKEN STONE BALLAST 30.00 C.Y. 42.50 \$1,275.00 Unit price bid shall not be less than: \$42.50 48 6.25 RS TEMPORARY SIGNS 484.00 S.F. 1.00 \$484.00 49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84	45 6	.02 AAN	UNCLASSIFIED EXCAVATION	315.00	C.Y.	85.00	\$26,775.00	
48 6.25 RS TEMPORARY SIGNS 484.00 S.F. 1.00 \$484.00 49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84	46 6	.02 PA	PNEUMATIC EXCAVATION AROUND TREES	20.00	C.Y.	150.00	\$3,000.00	
49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84	47 6	.20	BROKEN STONE BALLAST	30.00	C.Y.	42.50	\$1,275.00	Unit price bid shall not be less than: \$42.50
49 6.26 TIMBER CURB 984.00 L.F. 0.01 \$9.84	48 6	.25 RS	TEMPORARY SIGNS	484.00	S.F.	1.00	\$484.00	
	49 6	.26	TIMBER CURB	984.00	L.F.	0.01	\$9.84	
50 6.28 AA LIGHTED TIMBER BARRICADES 438.00 L.F. 1.00 \$438.00	50 6	.28 AA	LIGHTED TIMBER BARRICADES	438.00	L.F.	1.00		
51 6.30 AA BEAM TYPE GUIDE RAIL 150.00 L.F. 250.00 \$37,500.00	51 6	.30 AA	BEAM TYPE GUIDE RAIL	150.00	L.F.	250.00	\$37,500.00	
52 6.30 AR REMOVE EXISTING GUIDE RAIL 110.00 L.F. 25.00 \$2,750.00	52 6	.30 AR	REMOVE EXISTING GUIDE RAIL	110.00	L.F.	25.00	\$2,750.00	



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

Project ID: SANDHWSIB ePIN: 85024B0016

TOTAL BID PRICE: \$3,337,455.84

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
	6.40 B	ENGINEER'S FIELD OFFICE (TYPE B)		MONTH	1,000.00	<u> </u>	
54	6.43 D	DIGITAL PHOTOGRAPHS	140.00	SETS	20.00	\$2,800.00	
55	6.52 CG	CROSSING GUARD	1,611.00		5.00	\$8,055.00	
	6.55	SAWCUTTING EXISTING PAVEMENT	70.00	L.F.	2.00	\$140.00	
57	6.67	SUBBASE COURSE, SELECT GRANULAR MATERIAL	125.00	C.Y.	75.00	\$9,375.00	
	6.68	PLASTIC FILTER FABRIC	1,750.00		2.00	\$3,500.00	
59	6.75	GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE	40.00	C.Y.	145.00	\$5,800.00	
	6.83 AB	FURNISHING NEW TRAFFIC SIGN POSTS	14.00		1.00		
	6.83 AR	FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	8.00		3.00		
-	6.83 BA	INSTALLING TRAFFIC SIGNS	8.00		20.00		
	6.83 BB	INSTALLING TRAFFIC SIGN POSTS		L.F.	1.00	· -	
64	6.87	PLASTIC BARRELS	394.00	EACH	1.00	\$394.00	
65	60.11R606	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	10.00	L.F.	85.00	\$850.00	
66	60.11R608	FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS	275.00	L.F.		\$24,750.00	
		56)			90.00		
-	60.12D06	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS		L.F.	30.00		
68	60.12D08	LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	300.00	L.F.	150.00	\$45,000.00	
69	60.13M0A24	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	1.00	TONS	2,000.00	\$2,000.00	
70	61.11DMM06	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	EACH	3,500.00	\$7,000.00	
71	61.12DMM06	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	EACH	950.00	\$1,900.00	
72	62.11SD	FURNISHING AND DELIVERING HYDRANTS	2.00	EACH	7,500.00	\$15,000.00	
73	62.12SG	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	EACH	6,500.00	\$13,000.00	
74	62.13RH	REMOVING HYDRANTS	2.00	EACH	1,000.00	\$2,000.00	
75	62.14FS	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	4.00	EACH	600.00	\$2,400.00	
76	63.11VC	FURNISHING AND DELIVERING VARIOUS CASTINGS	2.00	TONS	500.00	\$1,000.00	
77	64.11EL	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	1.00	EACH	1,000.00	\$1,000.00	
78	64.11ST	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	3.00	EACH	850.00	\$2,550.00	
79	65.11BR	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	400.00	LBS.	1.00	\$400.00	
	65.21PS	FURNISHING AND PLACING POLYETHYLENE SLEEVE	150.00		1.00		Unit price bid shall not be less than: \$ 1.00
81	65.31FF	FURNISHING, DELIVERING AND PLACING FILTER FABRIC	5,000.00	S.F.	0.25	\$1,250.00	Unit price bid shall not be less than: \$ 0.25
	65.71SG	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	15.00		25.00		
	7.12 A	PROCTOR ANALYSIS		EACH	100.00		
	7.12 B	IN-PLACE SOIL DENSITY TEST		EACH	100.00		
	7.13 B	MAINTENANCE OF SITE		MONTH	12,200.00		Unit price bid shall not be less than: \$ 12,200.00
	7.35	PEDESTRIAN CHANNELIZER	1,419.00		1.00		
	7.55	NEW PIPE RAILINGS	150.00		300.00		
—	7.88 AA	RODENT INFESTATION SURVEY AND MONITORING	1.00		2,500.00		Unit price bid shall not be less than: \$ 2,500.00
-	7.88 AB	RODENT BAIT STATIONS	100.00		65.00		Unit price bid shall not be less than: \$ 65.00
	7.88 AC	BAITING OF RODENT BAIT STATIONS	100.00		11.00		Unit price bid shall not be less than: \$ 11.00
	7.88 AD	WATERBUG BAIT APPLICATIONS		BLOCK	75.00		Unit price bid shall not be less than: \$75.00
	70.11TT	TIMBER PILES (TREATED)	1,710.00		25.00		Unit price bid shall not be less than: \$ 25.00
	70.31FN	FENCING	905.00		1.50		Unit price bid shall not be less than: \$ 1.50
	70.71RR	RIPRAP	1,525.00		150.00		
95	70.71SB	STONE BALLAST	15.00	C.Y.	15.00	\$225.00	Unit price bid shall not be less than: \$ 15.00



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

Project ID: SANDHWSIB ePIN: 85024B0016

TOTAL BID PRICE: \$3,337,455.84

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col.8
			Engineer's				
Seq. No	Item Number	Item Description	Estimate of	Unit	Unit Price	Extended Amount	Price Criteria
			Quantity				
96	70.71SP	SLOPE PAVEMENT	135.00	C.Y.	95.00	\$12,825.00	
97	70.72GS	GROUTED STONE PAVEMENT	70.00	S.Y.	150.00	\$10,500.00	
98	70.81CB	CLEAN BACKFILL	175.00	C.Y.	100.00	\$17,500.00	Unit price bid shall not be less than: \$ 15.00
99	73.11AB	ADDITIONAL BRICK MASONRY	5.00	C.Y.	46.50	\$232.50	Unit price bid shall not be less than: \$ 46.50
100	73.21AC	ADDITIONAL CONCRETE	25.00	C.Y.	63.50	\$1,587.50	Unit price bid shall not be less than: \$ 63.50
101	73.51AS	ADDITIONAL STEEL REINFORCING BARS	1,700.00	LBS.	1.50	\$2,550.00	Unit price bid shall not be less than: \$ 1.50
102	73.61AT	ADDITIONAL STONE BALLAST	15.00	C.Y.	12.50	\$187.50	Unit price bid shall not be less than: \$ 12.50
103	76.11CR	CONSTRUCTION REPORT	1.00	L.S.	17,000.00	\$17,000.00	
104	76.31CM	CONTINUOUS REAL-TIME MONITORING FOR VIBRATIONS AND MOVEMENTS AND POST-CONSTRUCTION REPORT	6.00	MONTH	1.00	\$6.00	
105	8.01 C1	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	625.00	TONS	60.00	\$37,500.00	Unit price bid shall not be less than: \$ 60.00
106	8.01 C2	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	6.00	SETS	2,500.00	\$15,000.00	Unit price bid shall not be less than: \$ 2,500.00
107	8.01 H	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	156.00	TONS	375.00		Unit price bid shall not be less than: \$ 375.00
108	8.01 S	HEALTH AND SAFETY	1.00	L.S.	15,000.00	\$15,000.00	Unit price bid shall not be less than: \$ 15,000.00
109	8.01 W1	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	5.00	DAY	1,700.00	\$8,500.00	Unit price bid shall not be less than: \$ 1,700.00
110	8.01 W2	SAMPLING AND TESTING OF CONTAMINATED WATER	5.00	SETS	1,600.00	\$8,000.00	Unit price bid shall not be less than: \$ 1,600.00
111	8.02 A	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	500.00	S.F.	1.00	\$500.00	
112	8.02 B	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	200.00	L.F.	5.00	\$1,000.00	
113	8.2	JUTE MESH	1,500.00	S.Y.	7.00	\$10,500.00	
114	8.32	BARK CHIP MULCH	20.00	S.Y.	10.00	\$200.00	
115	9.23	PRICE ADJUSTMENTS	1.00	F.S.	10,000.00	\$10,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 10,000.00
	9.30	STORM WATER POLLUTION PREVENTION	1.00	L.S.	65,000.00		
117	9.91 A	PERMANENT STEEL SHEET PILING	6,850.00	S.F.	60.00	\$411,000.00	
	BMP-7.502	CONSTRUCTION LIMIT FENCE	700.00	L.F.	6.00		
	HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	1.00		40,000.00	. ,	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 40,000.00
	JB-FS-CE	CON EDISON JB FIXED SUM	1.00		10,000.00		PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 10,000.00
	JB-FS-VZ	ECS-VERIZON JB FIXED SUM	1.00		12,608.00		PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 12,608.00
	PK-37 L	LOAMY SAND TO SANDY TOPSOIL	450.00		75.00		Unit price bid shall not be less than: \$ 75.00
	PK-465 A	BROADCAST SEEDING OF NATIVE SEED AND COVER CROP	1,500.00		6.00		Unit price bid shall not be less than: \$ 6.00
124	UTL-6.01.8 (NG)	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01)	1.00	EACH	465.00	\$465.00	Unit price bid shall not be less than: \$ 465.00
125	UTL-6.04 (NG)	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04)	10.00	EACH	35.00	\$350.00	Unit price bid shall not be less than: \$ 35.00
126	UTL-6.05 (NG)	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05)	10.00	EACH	65.00	\$650.00	Unit price bid shall not be less than: \$ 65.00
127	UTL-6.06 (NG)	SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06)	73.00	C.Y.	180.00	\$13,140.00	Unit price bid shall not be less than: \$ 180.00
128	UTL-6.07 (NG)	TEST PITS FOR GAS FACILITIES (S6.07)	10.00	C.Y.	100.00	\$1,000.00	Unit price bid shall not be less than: \$ 100.00
129	UTL-GCS-2WS (NG)	GAS INTERFERENCES AND ACCOMMODATIONS	1.00	F.S.	50,000.00	\$50,000.00	PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 50,000.00
		SUBTOTAL				\$3,212,455.84	
130	6.39 B	MOBILIZATION	1.00	L.S.	\$125,000.00	\$125,000.00	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 8% OF THE ABOVE SUB-TOTAL PRICE.

QUALIFICATION FORM

Name of Contractor: Later Cuferota TV
Name of Project: SANDHWSI - Harold Ave
Location of Project: Stote Island
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: Scott Rygerio
Title: <i>EIC</i> Phone Number: <u>646.761.6861</u>
Brief description of the Project completed or the Project in progress: Roadway reconstruction
sleet files, Storm Sealers, Water Mains
Was the Project performed as a prime, a subcontractor or a sub-subcontractor:
Amount of Contract, Subcontract or Sub-subcontract: 4MM
Start Date and Completion Date: 3/21 - 8/22

Name of Contractor:
Name of Project: SE 811 Whitestone
Location of Project: Queens
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: Nayer Qasen
Title:
Brief description of the Project completed or the Project in progress: Sewers, wm, Tunneling, Pile?
Was the Project performed as a prime, a subcontractor or a sub-subcontractor:
Amount of Contract, Subcontract or Sub-subcontract:
Start Date and Completion Date:

Project References

A. Contracts completed by the bidder

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

	SEQ20053/ Sewert WM	SE812 Sewer + WM Statem Island	SER 200155 Sewert WM Staten Island	SANDHWSI Highway, Seater Island Sewer turn	SE 811 Sewers + WM	SERZOOZS8 Sewer+WM Stuten Island BMP	Project & Location Contract Type
		t un		than	un	BMP	ct Type
	*8.4m	*47mm	\$ 6. Smm	\$ 4.5 mm	\$55 mm	\$ 8.8mn	Contract Amount (\$000)
	6/20	12/10	12/20	8/22	12/23	3/24	Date Completed
	Mauro Petrincenti	beorge Cowan	Nich Vonotro	Short Roggeria	Nayot Rasem	DAC benje Lower, RE	Owner Reference & Tel. No.
	347. 203.2100	945.724.343	347.518.2842	646.761.6861	862.262.1890	646.477.2746	Architect/Engineer Reference & Tel. No. (if different from owner)

Contracts currently under construction by the bidder

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

			SER002329 Staten Island	Hw pl & orth	SE842AI Queens	Project & Location
			SewertWM	Masa	Sewert BMP	Contract Type
			\$17.5mm	\$ 2.3 mm	478.5mm \$19mm	Contract Amount (\$000)
			\$3mn	*/mn	* (9 mm	Subcontracted to Others (\$000)
			\$ 12 mm	\$2.1 mm	ww. Ks	Uncompleted Portion (\$000)
			6/26	5/25	9/26	Date Scheduled to Complete
				DDC Conille Address	Maura Devincenti	Owner Reference & Tel. No.
			347.578.2842	347.240.2495	347.203.2100	Architect/ Engineer Reference & Tel. No. (if different from owner)

C. Pending contracts not yet started by the bidder

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

				Nove.	Project & Location
					Contract Type
					Contract Amount (\$000)
					Date Scheduled to Start
					Owner Reference & Tel. No.
					Architect/Engineer Reference & Tel. No. (if different from owner)



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: IN HOUSE



FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

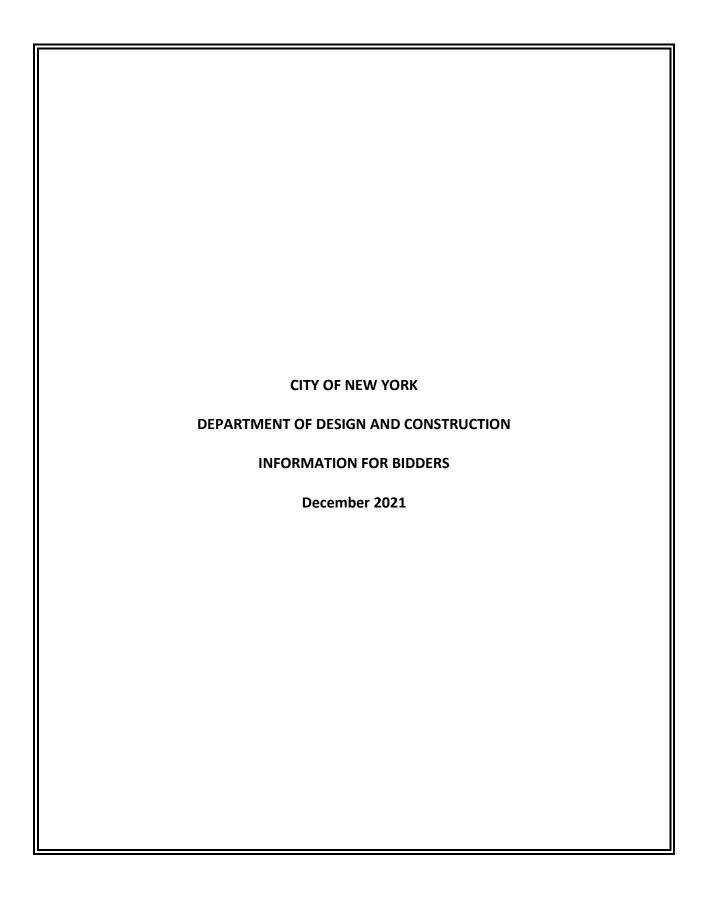
PROJECT ID: SANDHWSIB

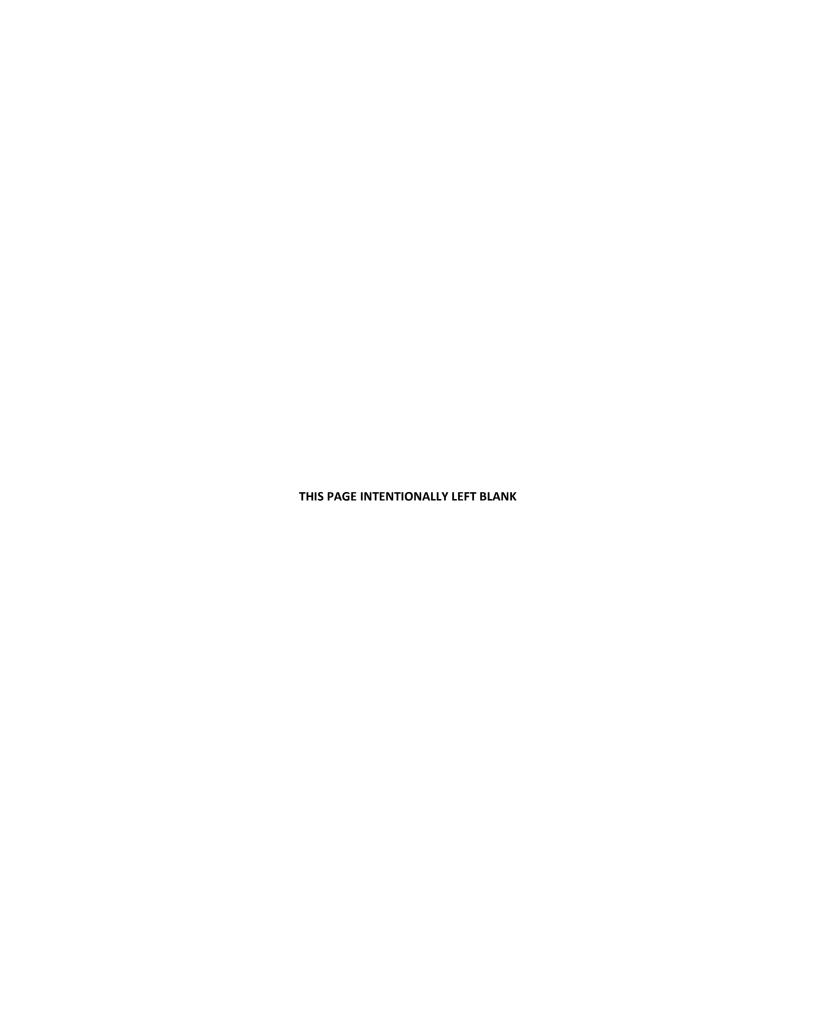
INFORMATION FOR BIDDERS
CONTRACT
PERFORMANCE AND PAYMENT BONDS
PREVAILING WAGE SCHEDULE

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK

TOGETHER WITH ALL WORK INCIDENTAL THERETO
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK







CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION

INFORMATION FOR BIDDERS

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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".

<u>2.</u> <u>Time and Place for Receipt of Bids</u>

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. <u>Bidder's Oath</u>

- (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. <u>Irrevocability of Bid</u>

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.

<u>12.</u> <u>Acknowledgment of Amendments</u>

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

13. <u>Bid Samples and Descriptive Literature</u>

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.

<u>14.</u> <u>Proprietary Information/Trade Secrets</u>

- (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.

<u>Restriction</u>: 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.

<u>17.</u> <u>Late Bids, Late Withdrawals and Late Modifications</u>

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) <u>Mistake Discovered Before Bid Opening</u>: 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) <u>Rejection of All Bids and Negotiation With All Responsible Bidders</u>: 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.

<u>26.</u> <u>Bid, Performance and Payment Security</u>

- (A) <u>Bid Security</u>: 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) <u>Performance and Payment Security</u>: 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) <u>Acceptable Types of Security</u>: 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) <u>Power of Attorney</u>: 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.

<u>27.</u> 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. <u>Labor Law Requirements</u>

- (A) <u>General</u>: 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) <u>Records:</u> 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) <u>Comparison of Bids</u>: 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) <u>Variations from Engineer's Estimate</u>: 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) <u>Variations from Engineer's Estimate</u>: 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 its 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. <u>Bid Submission Requirements</u>

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

39. Comptroller's Certificate

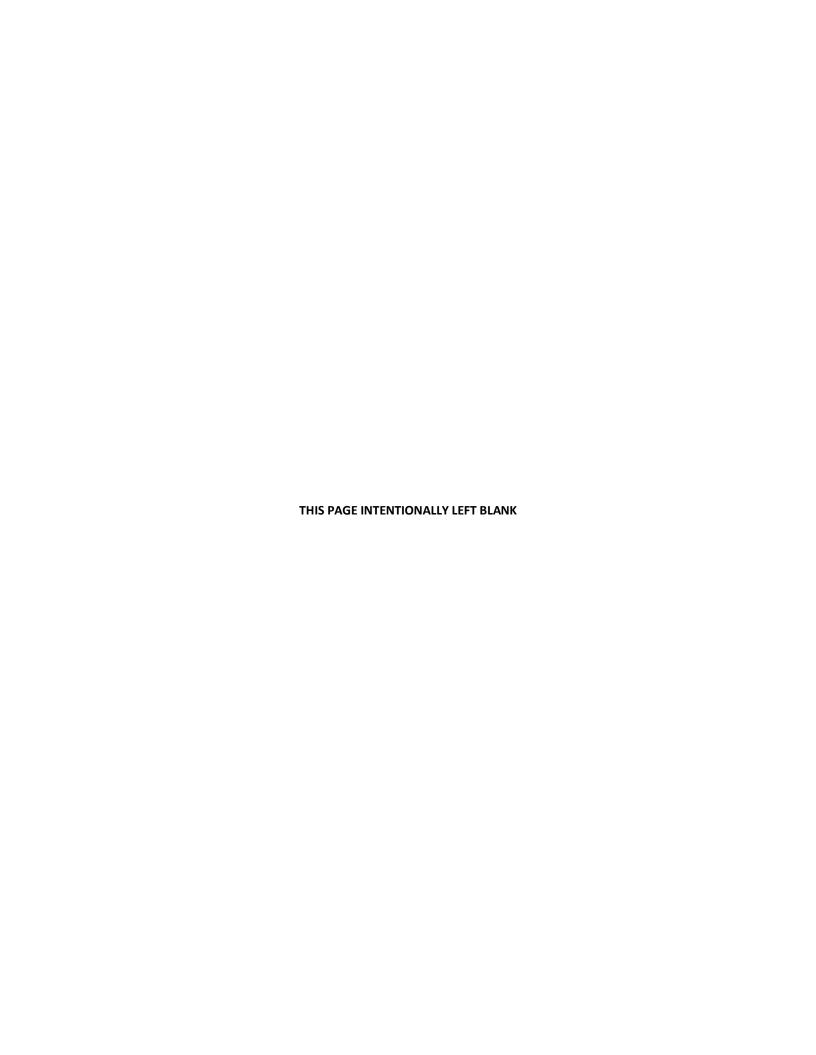
This Contract shall not be binding or of any force unless it is registered by the Comptroller in accordance with Section 328 of the City Charter and the Procurement Policy Board Rules. This Contract shall continue in force only after annual appropriation of funds by the City of New York and certification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



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
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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 fulltime 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 oversite 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, CITY OF NEW YORK

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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:

- Use of a safety checklist by a representative of the Office of Construction Safety (or other designated DDC A. 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.
- The RE will continually monitor the safety and environmental performance of the Contractor's employees B. 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.
- The Contractor will within 1 hour inform the RE of all accidents/incidents/near misses including all fatalities, E. 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 (with **DCWP** must notify copy to 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. 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 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.

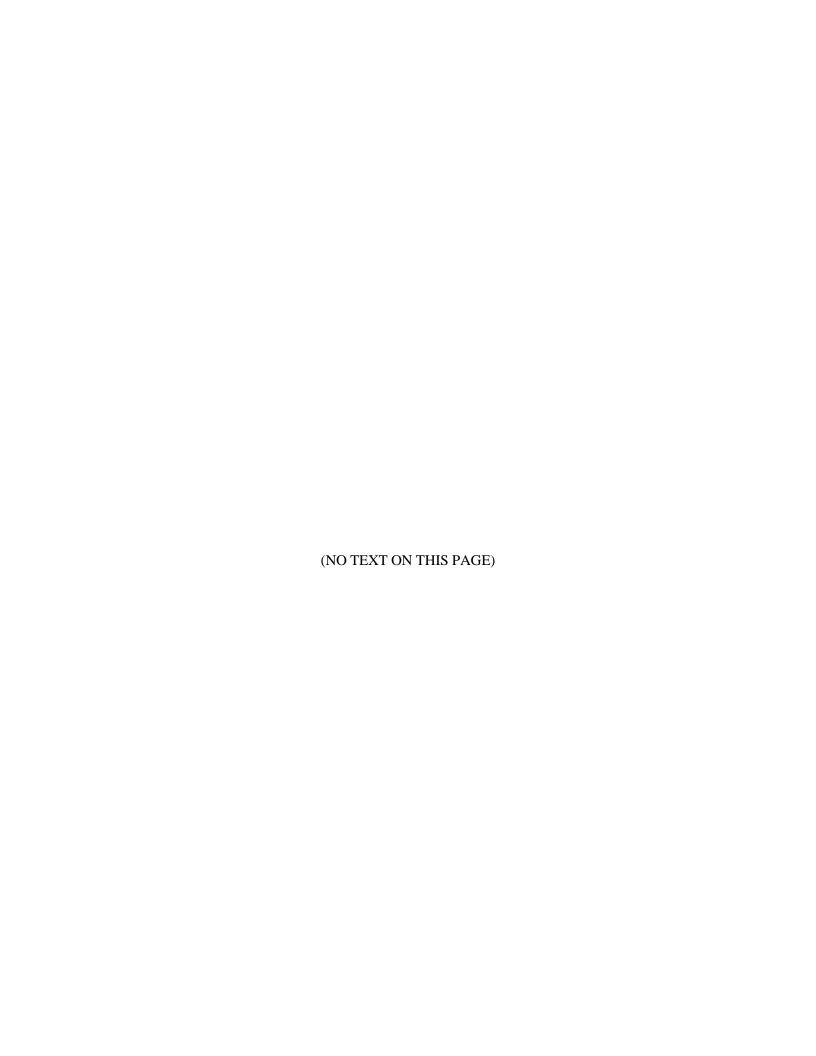
G. Enforcement and Penalties.

- 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 Polices 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.

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CITY OF NEW YORK STANDARD CONSTRUCTION CONTRACT

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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, impactdrills, 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 anddesign 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 rightto reject

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 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; NOTICESAND 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 AdditionalInsureds, 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 anyappropriate 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 Methodin 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, inthe 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 delayin 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 neitherknown 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, onsite 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:
 - 11.7.3.1Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;
 - 11.7.3.2Consequential 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, hasnot 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 **Contractors** 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 judgmentor 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 ofdelay 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 multipleof 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 reinspection, 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. 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

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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 sumsas 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 toreal 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 **Commissione**r 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 todo 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** byauthorizing 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

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 toa 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 forthat 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) x (HP rating) x (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 nonoperating Contractor-owned (or Subcontractor-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the City may restrict reimbursement to a purchasesalvage/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) x (HP rating) x (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
- 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

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 disputewas 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 requisitebackground 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 orreport to anyone who so participated; and
 - 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 thewritten 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.
- 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 ATIME & 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 withrespect 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 ORARCHITECT 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 bythe **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 issuean **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 withthe

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 Cityor 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 Title20, 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 PSLL 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 PSLL. The **Contractor** acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.

35.5.2 Pursuant to the PSLL 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 PSLL ("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 PSLL may use sick time for any of the following:

- 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 providerhas 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 PSLL. 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 PSLL 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 waivedin 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 Polices 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 termsof the **ContrSact** 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 amonthly 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 applicantfor 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, ratesof 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 AdministrativeCode, 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 fixedpursuant 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 breachof 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 **Citv**.
 - 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 Noticeof 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 whichthe **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 orshe is If the total cost of the Work under this Contract is at least two hundred fifty working. 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 acondition 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 f 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 submitto 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 44and 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; orif

- 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 forthin 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 employeeof 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 forthe 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 interestin, 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 inassessing 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 tothe 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 thathas 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 willbe 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 contraction 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 asses, 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 actionefforts 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 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** 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 strictaccordance 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, aboutor 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 reasonablyhave 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 Pages1-2) 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.
- 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 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.
- 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 **Inter Laperuta JV** ("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 **85024B0016-SANDHWSIB**.

- 1. (Question answer) SANDHWSIB Bid Bond.pdf Jun 5 2024 2:52PM
- 2. (Question answer) SANDHWSIB Bid Schedule 02.23.24 JWL.xlsx Jun 5 2024 2:55PM
- 3. Broker's Certification Jun 5 2024 2:40PM
- 4. Disability Insurance Jun 5 2024 2:39PM
- 5. Insurance Certificate Jun 5 2024 2:38PM
- 6. Proposal/Bid Jun 5 2024 2:41PM
- 7. RFx Document Jun 3 2024 4:34PM
- 8. SANDHWSIB Addendum1 Jun 3 2024 4:34PM
- 9. SANDHWSIB Addendum2 Jun 3 2024 4:34PM
- 10. SANDHWSIB Addendum3 Jun 3 2024 4:34PM
- 11. SANDHWSIB Bid Schedule (Addendum2) Jun 3 2024 4:34PM
- 12. SANDHWSIB Final Drawing (Addendum2) Jun 3 2024 4:34PM
- 13. SANDHWSIB V1 Infra Bid Booklet Jun 3 2024 4:34PM
- 14. SANDHWSIB VOL2 OF 3 Jun 3 2024 4:34PM
- 15. SANDHWSIB VOL3 OF 3 (Addendum2) Jun 3 2024 4:34PM
- 16. Security / Bond Jun 5 2024 2:37PM
- 17. Worker's Compensation Jun 5 2024 2:31PM

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:

EXIL MUSIKUME

(Signature)

1A87ABA0188B41C...

Name:

ERIC MACFARLANE

Title:

OFirst Deputy Commissioner

Date:

6/6/2024 | 10:49:20 PDT

Contractor

By: Inter Laperuta JV

Docusigned by:

Midwal Mutiko

DocuSign Envelope ID: 6453A7DE-DA36-43FD-9191-A7FA3D827BE8

(Signature)

 Name:
 Michael Mutino

 Title:
 Partner

 Date:
 6/6/2024 | 09:20:48 PDT

PAYMENT BOND

Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 1)

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we,Inter LaPeruta JV
35 Colonial Place, Mount Vernon, NY 10550
hereinafter referred to as the "Principal", and Western Surety Company
151 N. Franklin Street, Chicago, IL 60606
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
Three Million Three Hundred Thirty Seven Thousand Four Hundred Fifty Five and 84/100 Dollars
(\$_\$3,337,455.84) 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: SANDHWSIB Reconstruction of Segments of Huguenot Avenue/Swaim Avenue
Including Sewer, Water Main Work. Borough of Staten Island, City of New York
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

employees not regularly stationed at the site of the project; and

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

Wages and compensation for labor performed and services rendered by all persons engaged in

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 infull 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 place 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 Pringseals, and such of them as are corporations presents to be signed by their proper officers,	have caused their corporate seals to be he this 30th day of May	ereunto affixed and these
(Seal)	Inter LaPeruta JV (I	.S.)Principal
(Seal)	Western Surety Company By: Dana Granice, Attorney-In-Fact	Surety
(Seal)	Ву:	Surety
(Seal)	Ву:	Surety
(Seal)	By:	Surety
If the Contractor (Principal) is a partnership, partners.	the bond should be signed by each of the	individuals who are
If the Contractor (Principal) is a corporation, authorized officer, agent, or attorney-in-fact	the bond should be signed in its correct of	corporate name by aduly

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

PAYMENT BOND (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of	County of	ss:	
On this day to me known, who	of, before me, being by me duly sworn did depos	e personally came se and say that he resides at	of.
corporation; that o	that scribed in and which executed the ne of the seals affixed to said instruction, and that he signed him.	rument is such seal; that it was	knows the seal of said so affixed by order of
	Notary Publi	c or Commissioner of Deeds	
ACKNOWLEDGMENT	T OF PRINCIPAL, IF A PARTN	ERSHIP	
State of	County of	ss:	
to me known, and l	of, before meaning to me to be one of the member described in and who he that he executed the same as and	pers of the firm of	ument; and he
	Notary Publi	c or Commissioner of Deeds	
ACKNOWLEDGMENT	OF PRINCIPAL, IF AN INDIV	IDUAL	
State of	County of	ss:	
On this day to me known, and acknowledged	of	personally appeared cribed in and who executed the	foregoing instrument;
	Notary Public	c or Commissioner of Deeds	
parties; (b) approp bondis executed by from By-Laws or r	riate duly certified copy of Power ragent, officer or other representate esolutions of Surety under which is representative was issued, and (d)	r of Attorney or other certificative of Principal or Surety; (c) a Power of Attorney or other cer	ate of authority where a duly certified extract tificate of authority of

* * * * * * * * * * * * * * * Affix Acknowledgments and Justification of Sureties.

of assets and liabilities of Surety.

| Acknowledgment by Principal |
|---|
| State of New York } County of Queens } |
| On this day of 20_24, personally appeared before me Michael Mukico member of the firm/Joint Venture |
| before me Michael Mutico member of the firm/Joint Venture |
| of Inter LaPeruta JV to me known and known to me to be the individual described in |
| and who executed the foregoing instrument and he acknowledged to me that he executed |
| the same for an on behalf of said firm/Joint Venture. |
| Sworn before me this |
| STATE STATE NOTARY PUBLIC OILEGO04261 ONE STORE Notary Public |

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK
COUNTY OF NASSAU

| On thisM | AY 3 0 2024 | , before me personally ca | ame |
|---|------------------------|-------------------------------|----------------------------------|
| Dana Granice | | | vho, being by me duly sworn, |
| did depose and say; that he | e/she resides in _ | Suffolk County | , State of New York that |
| he/she is the Attorney-In-F | act of the <u>West</u> | ern Surety Company | |
| *************************************** | | | |
| the corporation described i | n which executed | the above instrument; that I | he/she knows the seal of said |
| corporation; that the seal a | ffixed to said instr | rument is such corporate sea | l; that is was so affixed by the |
| Board of Directors of said c | orporation; and th | nat he/she signed his/her nar | me thereto by like order; and |
| the affiant did further depo | se and say that th | e Superintendent of Insuran | ce of the State of New York, |
| has, pursuant to Section 11 | 11 of the Insuranc | ce Law of the State of New Yo | ork, issued to |
| Western Surety | Company | | (Surety) |
| his/her certificate of qualifi | cation evidencing | the qualification of said Com | npany and its sufficiency under |
| | | | ety of accepting and approving |
| t as such; and that such Ce | | | |
| | | | |

CRISTINA PAGAN
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01PA6389428
Qualified in Suffolk County
Commission Expires March 25, 2027

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Thomas Bean, Gerard S Macholz, Susan Lupski, Camille Maitland, George O Brewster, Colette R Chisholm, Robert T Pearson, Dana Granice, Michelle Wannamaker, Desiree Cardlin, Vincent A Walsh, Katherine Acosta, Nelly Renchiwich, Karolynne Ramirez, Individually

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the Authorizing By-Laws and Resolutions printed at the bottom of this page, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 30th day of April, 2024.

WESTERN SURETY COMPANY

State of South Dakota County of Minnehaha

On this 30th day of April, 2024, before me personally came Larry Kasten, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026

M. BENT SEAL NOTARY PUBLIC SEAL SOUTH DAKOTA

Larry Kasten, Vice President

M. Bent, Notary Public

CERTIFICATE

I, Paula Kolsrud, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law and Resolutions of the corporation printed below this certificate are still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 30th day of May, 2024



WESTERN SURETY COMPANY

Paula Kolsrud, Assistant Secretary

Authorizing By-Laws and Resolutions

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

This Power of Attorney is signed by Larry Kasten, Vice President, who has been authorized pursuant to the above Bylaw to execute power of attorneys on behalf of Western Surety Company

This Power of Attorney may be signed by digital signature and sealed by a digital or otherwise electronic-formatted corporate seal under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 27th day of April, 2022.

"RESOLVED: That it is in the best interest of the Company to periodically ratify and confirm any corporate documents signed by digital signatures and to ratify and confirm the use of a digital or otherwise electronic-formatted corporate seal, each to be considered the act and deed of the Company.

Go to www.cnasurety.com > Owner / Obligee Services > Validate Bond Coverage, if you want to verify bond authenticity.

WESTERN SURETY COMPANY Sioux Falls, South Dakota Statement of Net Admitted Assets and Liabilities December 31, 2022

ASSETS

| <u>ASSETS</u> | | |
|--|-------------------|--|
| Bonds Stocks Cash, cash equivalents, and short-term investments Receivables for securities Investment income due and accrued Premiums and considerations Amounts recoverable from reinsurers Current federal and foreign income tax recoverable and interest thereon Net deferred tax asset Receivable from parent, subsidiaries, and affiliates Other assets Total Assets | \$ | 1,963,735,416
16,356,743
842,484
50,000
18,288,449
58,660,094
31,089,427
 |
| <u>LIABILITIES AND SURPLUS</u> | | |
| Losses Loss adjustment expense Commissions payable, contingent commissions and other similar charges Other expenses (excluding taxes, license and fees) Taxes, License and fees (excluding federal and foreign income taxes) Federal and foreign income taxes payable Unearned premiums Advance premiums Ceded reinsurance premiums payable (net of ceding commissions) Amounts withheld or retained by company for account of others Provision for reinsurance Payable to parent, subsidiaries and affiliates Payable on security transactions Other liabilities Total Liabilities | \$ | 191,034,021
52,287,429
12,200,032
-
3,809,360
6,216,918
288,685,277
7,968,584
6,756,776
9,359,697
280,055
10,262,438
-
149,612
589,010,150 |
| Surplus Account: Common stock Gross paid in and contributed surplus Unassigned funds Surplus as regards policyholders Total Liabilities and Capital I, Julie Lee, Assistant Vice President of Western Surety Company hereby certificaccurate representation of the financial statement of the Company dated December with the various Insurance Departments and is a true and correct statement of the Surety Company as of that date. WESTERN S By | ber 31,
condit | 2022 as filed |
| Assistant Vice Pre | sident, E | external Reporting |

WALK DEATH Subscribed and sworn to me this 14th day of

March

___, 2023.

My commission expires:

"OFFICIAL SEAL"
YOLANDA JIMENEZ
Notary Public, State Of Illimois
My Commission Expires 09/24/2025 Commission No. 542740

Notary Public

PERFORMANCE BOND #1

<u>Performance Bond #1 (4 Pages)</u>: 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, Inter LaPeruta JV |
|---|
| 35 Colonial Place, Mount Vernon, NY 10550 |
| |
| hereinafter referred to as the "Principal," and,Western Surety Company |
| 151 N. Franklin Street, Chicago, IL 60606 |
| |
| 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 Three Million Three Hundred Thirty Seven Thousand Four Hundred Fifty Five and 84/100 Dollars |
| |
| (\$_3,337,455.84_) 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: SANDHWSIB Reconstruction of Segments of Huguenot Avenue/Swaim Avenue Including Sewer, |
| Water Main Work. Borough of Staten Island, City of New York |
| |

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth infull; **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 nulland 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 tocomplete 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 thecost 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 timeas 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 Workto 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 doneand 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 abasis 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

| 30th | day of | May | , 2024 | (Seal) |
|-------------------|-----------------------|--|--|----------|
| | | Inter L | aPeruta JV Principal | (L.S.) |
| (Seal) | By: | The state of the s | | |
| (Seal) | | By: | ourety Company nice, Attorney-In-Fact Surety | ·· |
| | | Ву <u>:</u> | | • |
| (Seal) | | | Surety | <u>.</u> |
| | | Ву: | | • |
| (Seal) | | | Surety | <u>-</u> |
| (0 - 1) | | Ву: | | · |
| (Seal) | | Ву: | Surety | · |
| Bond Premium Rate | \$14.40 Sliding Scale | | <u>.</u> | |
| Bond Premium Cost | \$33,346.00 | | | |

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 aduly 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.

PERFORMANCE BOND #1 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

| State of | Count | ty of | ss: |
|---|--|---|--|
| On this | day of | , 20 | before me personally |
| came | , being by me duly sworn di | | |
| to me known, who | , being by me duly sworn di | d depose and say that he/s | he residesat |
| of the corporation | described in and which ever | ; that he/she is the | nent; and that he/she signed his/her |
| name to the forego | oing instrument by order of | the directors of said corr | poration as the duly authorized and |
| binding act thereof | | | and any analy and and |
| | | | |
| D 111 C | | | |
| Notary Public or C | Commissioner of Deeds. | | |
| | ACKNOWLEDGMENT (| OF PRINCIPAL IF A PA | RTNERSHIP |
| State of | Count | ty of | ss: |
| - | | | |
| On this | day of | . 20 | before me personally |
| came | , | 7 | |
| to me known, who | , being by me duly sworn di | d dispose and say that he/s | she residesat |
| | a limited/general n | ; that ne/sne is
artnership existing under t | partner of he laws of the State of |
| | the partnership descr | ibed in and which execute | ed the foregoing instrument; and |
| that he/she signed | his/her name to the foregoin | g instrument as the duly a | uthorized and binding act ofsaid |
| partnership. | | | |
| | | | |
| Notary Public or Co | mmissioner of Deeds. | | |
| ivotary I dolle of Co | | | |
| | ACKNOWLEDGMENT (| OF PRINCIPAL IF AN 1 | <u>INDIVIDUAL</u> |
| State of | Count | ty of | ss: |
| | | | |
| On this | day of | , 20 | before me personally |
| came | ······································ | | |
| to me known, who | , being by me duly sworn di | d depose and say that he/s | he residesat |
| subscribed to the v | vithin instrument and acknow | | e individual whose name is |
| | dividual executed the instruction | | ner signature on the |
| , | | | |
| | | | |
| Notary Public or C | Commissioner of Deeds | | |
| | | | ledgments of the respective parties; |
| | | | tificate of authority where bond is |
| | | | y; (c) a duly certified extract from other certificate of authority of its |
| | | | est published financial statement of |
| assets and liabilitie | | Contract of the second | The state of the s |
| | | | |

Affix Acknowledgments and Justification of Sureties.

| Acknowledgment by Principal |
|---|
| State of New York } County of Queens } |
| On this 3rd day of June 2024, personally appeared before me Michael Mutino member of the firm/Joint Venture |
| before me Michael Mutino member of the firm/Joint Venture |
| of Inter LaPeruta JV to me known and known to me to be the individual described in |
| and who executed the foregoing instrument and he acknowledged to me that he executed |
| the same for an on behalf of said firm/Joint Venture. |
| Sworn before me this 3rd day of June 2024 |
| STATE OF NEW YORK NOTARY PUBLIC OTLEGOO4261 Notary Public Notary Public |

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW YORK
COUNTY OF NASSAU

| | MAY 3 0 2024 | | |
|-------------------------------|---|---------------------------|---|
| On this | British and the second | , before me perso | nally came |
| Dana Granice | | to me kn | own, who, being by me duly sworn, |
| did depose and say; that h | e/she resides in | Suffolk County | , State of New York that |
| he/she is the Attorney-In-f | act of the <u>Wes</u> | stern Surety Company | |
| | | | |
| the corporation described | in which execute | d the above instrumen | t; that he/she knows the seal of said |
| corporation; that the seal a | affixed to said ins | strument is such corpor | ate seal; that is was so affixed by the |
| Board of Directors of said | corporation; and | that he/she signed his/ | her name thereto by like order; and |
| the affiant did further depo | ose and say that t | the Superintendent of I | nsurance of the State of New York, |
| has, pursuant to Section 13 | 111 of the Insura | nce Law of the State of | New York, issued to |
| Western Sure | ty Company | | (Surety) |
| his/her certificate of qualif | ication evidencin | g the qualification of sa | aid Company and its sufficiency under |
| any law of the State of Nev | v York as surety a | and guarantor, and the | propriety of accepting and approving |
| it as such; and that such Ce | ertificate has not | been revoked. | |
| | | | |

CRISTINA PAGAN
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01PA6389428
Qualified in Suffolk County
Commission Expires March 25, 2027

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Thomas Bean, Gerard S Macholz, Susan Lupski, Camille Maitland, George O Brewster, Colette R Chisholm, Robert T Pearson, Dana Granice, Michelle Wannamaker, Desiree Cardlin, Vincent A Walsh, Katherine Acosta, Nelly Renchiwich, Karolynne Ramirez, Individually

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the Authorizing By-Laws and Resolutions printed at the bottom of this page, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 30th day of April, 2024.

WESTERN SURETY COMPANY

Larry Kasten, Vice President

State of South Dakota
County of Minnehaha

On this 30th day of April, 2024, before me personally came Larry Kasten, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026

M. BENT

SOUTH DAKOTA

SOUTH DAKOTA

Bent

M. Bent, Notary Public

CERTIFICATE

I, Paula Kolsrud, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law and Resolutions of the corporation printed below this certificate are still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 30th day of May, 2024



WESTERN SURETY COMPANY

Paula Kolsrud, Assistant Secretary

Authorizing By-Laws and Resolutions

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

This Power of Attorney is signed by Larry Kasten, Vice President, who has been authorized pursuant to the above Bylaw to execute power of attorneys on behalf of Western Surety Company.

This Power of Attorney may be signed by digital signature and sealed by a digital or otherwise electronic-formatted corporate seal under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 27th day of April, 2022:

"RESOLVED: That it is in the best interest of the Company to periodically ratify and confirm any corporate documents signed by digital signatures and to ratify and confirm the use of a digital or otherwise electronic-formatted corporate seal, each to be considered the act and deed of the Company."

Go to www.cnasurety.com > Owner / Obligee Services > Validate Bond Coverage, if you want to verify bond authenticity.

WESTERN SURETY COMPANY Sioux Falls, South Dakota Statement of Net Admitted Assets and Liabilities December 31, 2022

ASSETS

| <u>ASSETS</u> | | |
|--|-----------------|--|
| Bonds Stocks Cash, cash equivalents, and short-term investments Receivables for securities Investment income due and accrued Premiums and considerations Amounts recoverable from reinsurers Current federal and foreign income tax recoverable and interest thereon Net deferred tax asset Receivable from parent, subsidiaries, and affiliates Other assets Total Assets | \$ | 1,963,735,416
16,356,743
842,484
50,000
18,288,449
58,660,094
31,089,427
16,569,622
1,385
2,105,593,621 |
| LIABILITIES AND SURPLUS | | |
| Losses Loss adjustment expense Commissions payable, contingent commissions and other similar charges Other expenses (excluding taxes, license and fees) Taxes, License and fees (excluding federal and foreign income taxes) Federal and foreign income taxes payable Unearned premiums Advance premiums Ceded reinsurance premiums payable (net of ceding commissions) Amounts withheld or retained by company for account of others Provision for reinsurance Payable to parent, subsidiaries and affiliates Payable on security transactions Other liabilities Total Liabilities | \$ | 191,034,021
52,287,429
12,200,032
-
3,809,360
6,216,918
288,685,277
7,968,584
6,756,776
9,359,697
280,055
10,262,438
-
149,612
589,010,150 |
| Surplus Account: Common stock Gross paid in and contributed surplus Unassigned funds Surplus as regards policyholders Total Liabilities and Capital \$ 4,000,000 286,896,195 1,225,687,276 | \$
\$ | 1,516,583,471
2,105,593,621 |
| I, Julie Lee, Assistant Vice President of Western Surety Company hereby certificaccurate representation of the financial statement of the Company dated December with the various Insurance Departments and is a true and correct statement of the Surety Company as of that date. WESTERN S | ber 31
condi | . 2022, as filed |

By July Sel Assistant Vice President, External Reporting

Subscribed and sworn to me this

14th

day of

March

, 2023.

My commission expires:

"OFFICIAL SEAL"
YOLANDA JIMENEZ
Notary Public, State Of Illinois
My Commission Expires 09/24/2025
Commission No. 542740

B

MOMON

Notary Public



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 05/31/2024

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 rig | nts to the certificate holder in lieu of such | i endorsement(s). | |
|---------------------------------------|---|--|-------|
| PRODUCER | | CONTACT
NAME: | |
| Brown & Brown Insurance Services, Inc | | PHONE (914) 337-1833 FAX (A/C, No): | |
| 1133 Westchester Avenue | | E-MAIL
ADDRESS: 524.certifcates@bbrown.com | |
| Suite N-136 | | INSURER(S) AFFORDING COVERAGE | NAIC# |
| White Plains | NY 10604 | INSURER A: The Travelers Indemnity Company | 25658 |
| INSURED | | INSURER B: Berkley Regional Insurance Company | 29580 |
| Inter LaPeruta JV | | INSURER C: The Phoenix Insurance Company | 25623 |
| 35 Colonial Place | | INSURER D: Starr Indemnity & Liability Company | 38318 |
| | | INSURER E: Indian Harbor Insurance Company | 36940 |
| Mount Vernon | NY 10550 | INSURER F: | |
| 00\/EDA0E0 | OEDTICIOATE MUMBED. | DEVICION NUMBER | |

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.

| | ISR POLICY EXP ADDL SUBR POLICY EXP | | | | | | | |
|-------------|---|-----|-----|---------------------------|--------------|--------------|--|--|
| INSR
LTR | TYPE OF INSURANCE | | WVD | POLICY NUMBER | (MM/DD/YYYY) | (MM/DD/YYYY) | LIMITS | |
| | COMMERCIAL GENERAL LIABILITY CLAIMS-MADE COCCUR | | | | | | EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 | |
| | Contractual Liability | | | | | | MED EXP (Any one person) \$ 10,000 | |
| Α | | Υ | Υ | VTC2K-CO-3X459477-IND-23 | 12/31/2023 | 12/31/2024 | PERSONAL & ADV INJURY \$ 2,000,000 | |
| | GEN'L AGGREGATE LIMIT APPLIES PER: | | | | | | GENERAL AGGREGATE \$ 4,000,000 | |
| | POLICY PRO-
JECT LOC | | | | | | PRODUCTS - COMP/OP AGG \$ 4,000,000 | |
| 1 | OTHER: | | | | | | \$ | |
| | AUTOMOBILE LIABILITY | | | | | | COMBINED SINGLE LIMIT \$ 1,000,000 | |
| 1 | X ANY AUTO | | | | | | BODILY INJURY (Per person) \$ | |
| Α | OWNED SCHEDULED AUTOS ONLY AUTOS | Υ | Υ | VT2NK-CAP-3X459465-IND-23 | 12/31/2023 | 12/31/2024 | BODILY INJURY (Per accident) \$ | |
| | HIRED NON-OWNED AUTOS ONLY | | | | | | PROPERTY DAMAGE (Per accident) \$ | |
| | | | | | | | \$ | |
| | UMBRELLA LIAB COCCUR | | | | | | EACH OCCURRENCE \$ 3,000,000 | |
| В | B EXCESS LIAB CLAIMS-MADE | | Y | BCS 8800088-20 | 12/31/2023 | 12/31/2024 | AGGREGATE \$ 3,000,000 | |
| | DED RETENTION \$ 0 | | | | | | \$ | |
| | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY | | | | | | ➤ PER STATUTE OTH-
ER | |
| l c | ANY PROPRIETOR/PARTNER/EXECUTIVE | N/A | Y | UB-8X176927-23-25-G | 12/31/2023 | 12/31/2024 | E.L. EACH ACCIDENT \$ 1,000,000 | |
| ` | (Mandatory in NH) | | ' | | | | E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 | |
| | If yes, describe under
DESCRIPTION OF OPERATIONS below | | | | | | E.L. DISEASE - POLICY LIMIT \$ 1,000,000 | |
| D | D Excess Liability | | Υ | 1000585254231 | 12/31/2023 | 12/31/2024 | Occurrence/Aggregate \$9,000,000 | |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Project: RECONSTRUCTION OF SEGMENTS OF HUGENOT AVENUE/SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF

STÁTEN ISLAND

Project ID.: SANDHWSIB

City of New York, including its officials and employees; The Consolidated Edison Company of New York, Inc. ("Coned"); National Grid USA ("National Grid"); Verizon New York Inc. ("Verizon") are included as an additional insured and coverage applies on a primary and non-contributory basis on the general liability, automobile, and excess liability policies per the attached endorsements/forms if required by written contract. Waiver of Subrogation applies on the

| CERTIFICATE HOLDER | | CANCELLATION |
|---|------------------------------|--|
| City of New York, Departmen
30-30 Thomson Avenue | t of Design and Construction | SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. |
| Long Island City | NY 11101 | AUTHORIZED REPRESENTATIVE JL 411. |
| | | |

| SENCY CUSTOMER ID: 002 |
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ADDITIONAL REMARKS SCHEDULE

| ADDITIONA | ADDITIONAL REMARKS SCHEDULE | | | |
|--|-----------------------------|-------------------------|--|--|
| AGENCY | | NAMED INSURED | | |
| Brown & Brown Insurance Services, Inc. | | Inter Contracting Corp. | | |
| POLICY NUMBER | | | | |
| CARRIER | NAIC CODE | | | |
| | | EFFECTIVE DATE: | | |

| POLICY NUMBER | | | | | | | | | | |
|---|-------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | |
| CARRIER | NAIC CODE | | | | | | | | | |
| ADDITIONAL DEMARKS | | EFFECTIVE DATE: | | | | | | | | |
| ADDITIONAL REMARKS | | | | | | | | | | |
| THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACOR FORM NUMBER: 25 FORM TITLE: Certificate of Liability | v Insurance | | | | | | | | | |
| | | | | | | | | | | |
| general liability, automobile, excess liability, and workers' compensation p | olicles per the a | itached endorsements/forms, if required by written contract. | | | | | | | | |
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| SENCY CUSTOMER | ID: | 0020942 |
|----------------|-----|---------|
|----------------|-----|---------|

MER ID: 00209423 LOC #:



ADDITIONAL REMARKS SCHEDULE

| Page | of |
|------|----|

| AGENCY
Brown & Brown of New York, Inc. | | NAMED INSURED
Inter LaPeruta JV | |
|---|---|------------------------------------|------------|
| POLICY NUMBER PEC005199306 | 35 Colonial Place
Mount Vernon, NY 10550 | | |
| CARRIER | NAIC CODE | | |
| Indian Harbor Insurance Company | 36940 | EFFECTIVE DATE: | 12/31/2023 |

| ilidian Harbor ilisurai | loc Company | | | 30940 | EFFECTIVE DATE: | 12/31/2023 | |
|---|-----------------|---------------|-----------------------|-------------------|-----------------|------------|--|
| ADDITIONAL REM | ARKS | | | • | • | | |
| THIS ADDITIONAL | | FORM IS A SCH | IEDULE TO ACOE | RD FORM | | | |
| | | CODM TITLE | Certificate of Liabil | ity Insurance: Na | otes | | |
| FORM NUMBER: | | | | , modranos. N | | | |
| Pollution/Professiona
Indian Harbor Insura | l Liability | | | | | | |
| Indian Harbor Insurar | nce Company | | | | | | |
| Policy # PEC0051993
Term: 12/31/2023-12 | 306
/31/2024 | | | | | | |
| Policy Aggregate Lim | it of Insurance | : \$5,000,000 | | | | | |
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CITY OF NEW YORK CERTIFICATION BY INSURANCE BROKER OR AGENT

Brown & Brown Insurance Services, Inc

The undersigned insurance broker or agent 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)] |
|---|---|
| | 1133 Westchester Avenue, Suite N-136 White Plains, NY 10604 Address of broker or agent (typewritten)] Elijah.Walker@bbrown.com [Email address of broker or agent (typewritten)] |
| | Phone: 914-337-1833 Fax: 914-337-1596 |
| [
- | Phone number/Fax number of broker or agent (typewritten)] (Lipting Alaberta Signature of authorized official, broker, or agent] |
| | Elijah Walker, Associate Account Manager |
| l | Name and title of authorized official, broker, or agent (typewritten)] |
| State of New York) | |
|) ss.:
County ofWestchester) | |
| Sworn to before me this 31st day of May NOTARY PUBLIC FOR THE STATE OF | New York |
| HOTELT TODDIOTOR TIED DITTED OF | ATOM A OTAL |
| PLETH HALOUSY | |



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 | | | | |
|---|--|--|--|--|
| 1a. Legal Name & Address of Insured (use street address only) | 1b. Business Telephone Number of Insured | | | |
| Inter LaPeruta JV | 914-863-0000 | | | |
| 35 Colonial Place | | | | |
| Mount Vernon, NY 10550 | 1c. Federal Employer Identification Number of Insured or Social Security | | | |
| Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy) | Number 47-1391529 | | | |
| Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) City of New York, Department of Design and Construction 30-30 Thomson Avenue Long Island City NY 11101 | 3a Name of Insurance Carrier HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY 3b Policy Number of Entity Listed in Box "1a" LNY647026001 3c Policy effective period 10/01/2023-12/31/2024 | | | |
| | -5,5-,-0-5 | | | |
| 4. Policy provides the following benefits: X A. Both disability and paid family leave benefits. B. Disability benefits only. C. Paid family leave benefits only. 5. Policy covers: X 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. | | | | |
| 1 | Moccia | | | |
| (Signature of insurance | carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier) | | | |
| Telephone Number (914)337-1833 Name and Title: John Moccia, Executive Vice President | | | | |
| 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 "1 a" 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 my 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 not withstanding 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.



CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

| 1a. Legal Name & Address of Insured (use street address only) | 1b. Business Telephone Number of Insured | | |
|---|--|--|--|
| Inter LaPeruta JV | 914-863-0000 | | |
| 35 Colonial Place
Mount Vernon, NY 10 5 50 | 1c. NYS Unemployment Insurance Employer Registration Number of Insured | | |
| Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy) | 1d. Federal Employer Identification Number of Insured or Social Security Number 47-1391529 | | |
| Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) | 3a. Name of Insurance Carrier | | |
| | The Phoenix Insurance Company | | |
| City of New York, Department of Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101 | 3b. Policy Number of Entity Listed in Box "1a" | | |
| | UB-8X176927-23-25-G | | |
| | 3c. Policy effective period | | |
| | 12/31/2023 to 12/31/2024 | | |
| | 3d. The Proprietor, Partners or Executive Officers are | | |
| | included. (Only check box if all partners/officers included) | | |
| | all excluded or certain partners/officers excluded. | | |
| TI: 05 0 00 0 00 00 00 00 00 00 00 00 00 00 | | | |

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.

| _ | (Print name of authorized representative of | r licensed agent of insurance carrier) |
|--------------|---|--|
| Approved by: | Jun- | 05/31/2024 |
| _ | (Signature) | °(Date) |
| Title: Ex | recutive Vice President | |

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.

C-105.2 (9-17) www.wcb.ny.gov

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.

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

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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

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ADDENDUM

List of Amended Classifications

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- 2. CORE DRILLER
- 3. DRIVER: TRUCK (TEAMSTER)
- 4. ENGINEER FIELD (HEAVY CONSTRUCTION)
- 5. HAZARDOUS MATERIAL HANDLER
- 6. HOUSE WRECKER
- 7. IRON WORKER ORNAMENTAL
- 8. IRON WORKER STRUCTURAL
- 9. MARBLE MECHANIC
- 10. MASON TENDER
- 11. MASON TENDER (INTERIOR DEMOLITION WORKER)
- 12. MOSAIC MECHANIC
- 13. PLUMBER
- 14. PLUMBER (MECHNICAL EQUIPMENT AND SERVICE)
- 15. PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)
- 16. POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER
- 17. SHEET METAL WORKER
- 18. SHEET METAL WORKER SPECIALTY
- 19. SIGN ERECTOR
- 20. STEAMFITTER REFRIGERATION AND AIR CONDITIONER
- **21. TAPER**
- 22. TILE FINISHER
- 23. TILE LAYER SETTER

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ASBESTOS HANDLER SEE HAZARDOUS MATERIAL HANDLER

BLASTER

<u>Blaster</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$57.71

Supplemental Benefit Rate per Hour: \$52.23

Blaster - Hydraulic Trac Drill

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$51.85

Supplemental Benefit Rate per Hour: \$52.23

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$51.02

Supplemental Benefit Rate per Hour: \$52.23

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.50

Supplemental Benefit Rate per Hour: \$52.23

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$22.25

Supplemental Benefit Rate per Hour: \$52.23

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.

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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 $\frac{1}{2}$), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

BOILERMAKER

Boilermaker

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$65.88

Supplemental Benefit Rate per Hour: \$48.47

Supplemental Note: For time and one half overtime - \$72.13 For double overtime - \$95.79

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 Dav

President's Day

Memorial Day

Independence Day

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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 Holidavs

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$64.23

Supplemental Benefit Rate per Hour: \$31.75

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$65.34

Supplemental Benefit Rate per Hour: \$33.05

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

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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 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$55.05

Supplemental Benefit Rate per Hour: \$47.88

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

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Paid Holidays

None

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$59.16

Supplemental Benefit Rate per Hour: \$55.31

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

Wieilioliai 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.

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS

(Excludes Engineered Structures and Building Foundations)

Carpenter High Rise A

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$51.48

Supplemental Benefit Rate per Hour: \$44.74

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$40.89

Supplemental Benefit Rate per Hour: \$18.05

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

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Christmas Day

Paid Holidays

None

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$53.50

Supplemental Benefit Rate per Hour: \$48.45

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.

(Carpenters District Council)

CARPENTER - WOOD WATER STORAGE TANK

Tank Mechanic

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$37.13

Supplemental Benefit Rate per Hour: \$24.18

Tank Helper

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$29.23

Supplemental Benefit Rate per Hour: \$24.18

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......two (2) weeks 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$47.28

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$36.80

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

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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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$53.77

Supplemental Benefit Rate per Hour: \$34.01

Supplemental Note: Supplemental benefit time and one half rate: \$61.47; 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

I char 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

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$43.88

Supplemental Benefit Rate per Hour: \$31.35

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$46.25

Supplemental Benefit Rate per Hour: \$33.36

Core Driller Helper

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$34.47

Supplemental Benefit Rate per Hour: \$31.35

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$36.28

Supplemental Benefit Rate per Hour: \$33.36

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$31.02

Supplemental Benefit Rate per Hour: \$31.35

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$32.62

Supplemental Benefit Rate per Hour: \$33.36

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$27.58

Supplemental Benefit Rate per Hour: \$31.35

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$28.98

Supplemental Benefit Rate per Hour: \$33.36

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$24.13

Supplemental Benefit Rate per Hour: \$31.35

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$25.32

Supplemental Benefit Rate per Hour: \$33.36

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 Veteran's 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 (7½) 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$58.90

Supplemental Benefit Rate per Hour: \$58.37

Derrick Person & Rigger - Site Work

Assists the Stone Mason-Setter in the setting of stone and paving stone.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$46.49

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Supplemental Benefit Rate per Hour: \$46.47

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.

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$74.03

Supplemental Benefit Rate per Hour: \$55.31

Diver Tender (Marine)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$53.57

Supplemental Benefit Rate per Hour: \$55.31

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

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

<u>Dockbuilder - Pile Driver</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$59.16

Supplemental Benefit Rate per Hour: \$55.31

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.

(Carpenters District Council)

DRIVER: TRUCK (TEAMSTER)

Driver - Dump Truck

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 6/30/2024

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

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

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

Shift Rates

Off shift work commencing between 6:00 P.M. and 5:00 A.M. shall work eight and one half (8 1/2) hours allowing for one half hour for lunch

Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2023 - 1/14/2024

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

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$42.09

Supplemental Benefit Rate per Hour: \$49.31

Supplemental Note: Over 40 hours worked: time and one half rate \$19.58; double time rate \$26.10

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). Martin Luther King Jr. Day 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
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

New Year's Day
Martin Luther King Jr. 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: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$61.00

Supplemental Benefit Rate per Hour: \$60.06

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$62.00

Supplemental Benefit Rate per Hour: \$62.25

* 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: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$91.50

Supplemental Benefit Rate per Hour: \$62.02

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$93.00

Supplemental Benefit Rate per Hour: \$64.24

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Swing Shift)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$71.57

Supplemental Benefit Rate per Hour: \$68.14

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$72.75

Supplemental Benefit Rate per Hour: \$70.56

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Swing Shift Overtime after 7.5 hours)

Effective Period: 7/1/2023 - 4/12/2024 Wage Rate per Hour: \$107.36

Supplemental Benefit Rate per Hour: \$70.45

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$109.13

Supplemental Benefit Rate per Hour: \$72.91

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$80.17

Supplemental Benefit Rate per Hour: \$74.99

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$81.49

Supplemental Benefit Rate per Hour: \$77.61

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician "A" (Graveyard Shift Overtime after 7 hours)

Effective Period: 7/1/2023 - 4/12/2024 Wage Rate per Hour: \$120.26

Supplemental Benefit Rate per Hour: \$77.57

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$122.24

Supplemental Benefit Rate per Hour: \$80.23

* 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.

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)

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"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: 7/1/2023 - 4/12/2024

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

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$32.00

Supplemental Benefit Rate per Hour: \$27.20

First and Second Year "M" Wage Rate Per Hour: \$27.50 First and Second Year "M" Supplemental Rate: \$24.79

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: 7/1/2023 - 4/12/2024

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

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$48.00

Supplemental Benefit Rate per Hour: \$29.23

First and Second Year "M" Wage Rate Per Hour: \$41.25 First and Second Year "M" Supplemental Rate: \$26.52

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 Dav Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Dav

Veteran's Day

Thanksgiving Day

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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: 7/1/2023 - 3/6/2024 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

Effective Period: 3/7/2024 - 6/30/2024

Wage Rate per Hour: \$37.40

Supplemental Benefit Rate per Hour: \$21.44

Supplemental Note: \$19.31 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

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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

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: 7/1/2023 - 4/17/2024

Wage Rate per Hour: \$61.00

Supplemental Benefit Rate per Hour: \$62.13

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/18/2024 - 6/30/2024

Wage Rate per Hour: \$62.00

Supplemental Benefit Rate per Hour: \$62.85

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2023 - 4/17/2024

Wage Rate per Hour: \$46.66

Supplemental Benefit Rate per Hour: \$47.16

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/18/2024 - 6/30/2024

Wage Rate per Hour: \$47.66

Supplemental Benefit Rate per Hour: \$48.72

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

<u> Electrician - Electro Pole Maintainer</u>

PUBLISH DATE: 1/15/2024 EFFECTIVE PERIOD: JULY 1, 2023 THROUGH JUNE 30, 2024 Page 27 of 94

Effective Period: 7/1/2023 - 4/17/2024

Wage Rate per Hour: \$40.61

Supplemental Benefit Rate per Hour: \$42.88

* Supplemental Note: See Supplemental Benefit Rate per Hour Note below

Effective Period: 4/18/2024 - 6/30/2024

Wage Rate per Hour: \$41.61

Supplemental Benefit Rate per Hour: \$44.45

* 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.

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

Paid Holidays

Christmas Day

None

(Local #3)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$77.49

Supplemental Benefit Rate per Hour: \$40.28

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.

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$60.89

Supplemental Benefit Rate per Hour: \$40.18

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

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

Cherrypickers 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$75.82

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$121.31

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, Cherrypickers. 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 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 person auger.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$73.45

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$117.52

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$69.49

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$111.18

Engineer - Heavy Construction Maintenance Engineer I

Installing, Repairing, Maintaining, Dismantling 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$73.08

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$116.93

Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$97.21

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$155.54

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$46.89

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$75.02

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$48.20

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$77.12

Engineer - Heavy Construction Service Engineer

Gradalls: Concrete Pumps: Power Houses: Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$65.49

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$104.78

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.10

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$70.56

Engineer - Steel Erection Maintenance Engineers

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Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$70.20

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$112.32

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$65.46

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$104.74

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$48.91

Supplemental Benefit Rate per Hour: \$46.68 Supplemental Note: \$85.96 on overtime

Shift Wage Rate: \$78.26

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
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

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Engineer - Building Work Maintenance Engineers I

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$63.51

Supplemental Benefit Rate per Hour: \$45.77 Supplemental Note: \$84.14 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$48.46

Supplemental Benefit Rate per Hour: \$45.77 Supplemental Note: \$84.14 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$60.19

Supplemental Benefit Rate per Hour: \$45.77 Supplemental Note: \$84.14 on overtime

Engineer - Building Work Oilers II

Oilers on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors (three or more in Battery).

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.93

Supplemental Benefit Rate per Hour: \$45.77 Supplemental Note: \$84.14 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.

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
Thanksgiving Day
Christmas Day

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$42.78

Supplemental Benefit Rate per Hour: \$27.76

Supplemental Note: Overtime Benefit Rate - \$33.27 per hour (time & one half) \$38.77 per hour (double time).

<u>Instrument Person</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$34.64

Supplemental Benefit Rate per Hour: \$27.76

Supplemental Note: Overtime Benefit Rate - \$33.27 per hour (time & one half) \$38.77 per hour (double time).

<u>Rodperson</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$29.50

Supplemental Benefit Rate per Hour: \$27.76

Supplemental Note: Overtime Benefit Rate - \$33.27 per hour (time & one half) \$38.77 per hour (double time).

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
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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$66.83

Supplemental Benefit Rate per Hour: \$42.39

Supplemental Note: Overtime Benefit Rate - \$59.89 per hour (time & one half) \$77.38 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$49.67

Supplemental Benefit Rate per Hour: \$42.39

Supplemental Note: Overtime Benefit Rate - \$59.89 per hour (time & one half) \$77.38 per hour (double time).

Field Engineer - BC Rodperson

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$30.60

Supplemental Benefit Rate per Hour: \$42.39

Supplemental Note: Overtime Benefit Rate - \$59.89 per hour (time & one half) \$77.38 per hour (double time).

Overtime Description

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$77.94

Supplemental Benefit Rate per Hour: \$44.82

Supplemental Note: Overtime benefit rate - \$63.41 per hour (time & one half), \$82.00 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$56.07

Supplemental Benefit Rate per Hour: \$44.82

Supplemental Note: Overtime benefit rate - \$63.41 per hour (time & one half), \$82.00 per hour (double time).

Field Engineer - HC Rodperson

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$46.34

Supplemental Benefit Rate per Hour: \$44.82

Supplemental Note: Overtime benefit rate - \$63.41 per hour (time & one half), \$82.00 per hour (double time).

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
Martin Luther King Jr. Day
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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$72.66

Supplemental Benefit Rate per Hour: \$44.37

Supplemental Note: Overtime benefit rate - \$62.73 per hour (time & one half), \$81.09 per hour (double time).

<u>Field Engineer - Steel Erection Instrument Person</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$55.67

Supplemental Benefit Rate per Hour: \$44.37

Supplemental Note: Overtime benefit rate - \$62.73 per hour (time & one half), \$81.09 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$35.79

Supplemental Benefit Rate per Hour: \$44.37

Supplemental Note: Overtime benefit rate - \$62.73 per hour (time & one half), \$81.09 per hour (double time).

Overtime Description

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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.

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$90.59

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$144.94

Operating Engineer - Road & Heavy Construction II

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$93.75

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$150.00

Operating Engineer - Road & Heavy Construction III

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Mine Hoists (Cranes, etc. when used as Mine Hoists)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$96.73

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$154.77

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$94.42

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$151.07

Operating Engineer - Road & Heavy Construction V

Pile Drivers & Rigs (working alongside Dock Builder foreperson): Derrick Boats, Tunnel Shovels.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$92.58

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$148.13

Operating Engineer - Road & Heavy Construction VI

Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$88.01

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$140.82

Operating Engineer - Road & Heavy Construction VII

Barrier Movers, Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$71.33

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$114.13

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Operating Engineer - Road & Heavy Construction VIII

Utility Compressors

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$55.65

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$69.81

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$83.78

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$134.05

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$77.11

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$123.38

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$60.16

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$96.26

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$88.94

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$142.30

Operating Engineer - Road & Heavy Construction XIII

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$86.19

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$137.90

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$82.44

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$131.90

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$56.01

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$89.62

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$78.79

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$126.06

Operating Engineer - Road & Heavy Construction XVII

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$79.36

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$126.98

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2023 - 6/30/2024 Wage Rate per Hour: \$113.37

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$181.39

<u>Operating Engineer - Paving I</u>

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$88.01

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$140.82

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$85.79

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$137.26

Operating Engineer - Paving III

Asphalt Plants

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$72.72

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$116.35

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$94.01

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$56.43

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Concrete III

Micro-traps (Negative Air Machines), Vac-All Remediation System.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$75.37

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$97.68

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$156.29

Operating Engineer - Steel Erection II

Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$93.89

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$150.22

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$56.29

Supplemental Benefit Rate per Hour: \$36.05

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Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$90.06

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine. (Public Works Only)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$53.64

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Shift Wage Rate: \$85.82

Operating Engineer - Building Work I

Forklifts, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$73.47

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$55.13

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$89.09

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$94.30

Supplemental Benefit Rate per Hour: \$36.05

Supplemental Note: \$65.90 overtime hours

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$81.57

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$80.71

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

Operating Engineer - Building Work VII

Rack & Pinion and House Cars

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$64.28

Supplemental Benefit Rate per Hour: \$36.05 Supplemental Note: \$65.90 overtime hours

For New House Car projects Wage Rate per Hour \$51.40

For New House Car projects: Supplemental Benefit overtime hours: \$50.98

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

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Columbus Day Veteran's Day Thanksgiving Day Day after Thanksgiving Christmas Day

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$55.05

Supplemental Benefit Rate per Hour: \$47.88

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

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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)

<u>Glazier</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$47.95

Supplemental Benefit Rate per Hour: \$53.34

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, Storm windows and storm doors, Herculite door repairs, Door closer repairs, Glass tinting.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$27.05

Supplemental Benefit Rate per Hour: \$26.50

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 Dav

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$38.55

Supplemental Benefit Rate per Hour: \$20.60

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Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$21.30

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$69.96

Supplemental Benefit Rate per Hour: \$35.76

Overtime Description

Premium rate shall be paid for supplemental benefits during overtime work.

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 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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$38.93

Supplemental Benefit Rate per Hour: \$31.27

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$39.23

Supplemental Benefit Rate per Hour: \$31.57

House Wrecker - Tier B

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$28.16

Supplemental Benefit Rate per Hour: \$23.68

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Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$28.46

Supplemental Benefit Rate per Hour: \$23.98

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

Paid Holidays

None

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

Iron Worker - Ornamental

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$47.15

Supplemental Benefit Rate per Hour: \$63.75

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in

effect.

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$47.40

Supplemental Benefit Rate per Hour: \$64.75

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 should be paid for all work on a Saturday thereafter. Four (4), ten (10) hour days may be worked at straight time, Monday to Thursday.

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

Paid Holidays

None

Shift Rates

When two or three shifts are employed on a job, Monday through Friday, each shift will be paid eight (8) hours at the straight time rate for eight (8) hours of work; at time and one-half the regular straight time rate for the first two (2) hours of overtime worked beyond eight (8) hours; and at double time for all work thereafter. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, eight (8) hours will be paid at straight time rate for seven (7) hours of work, and all overtime shall be paid at time and one-half the regular straight time rates. On Saturday, 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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$57.20

Supplemental Benefit Rate per Hour: \$86.77

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in

effect.

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$57.70

Supplemental Benefit Rate per Hour: \$88.02

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

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.50

Supplemental Benefit Rate per Hour: \$52.23

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 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 $\frac{1}{2}$), 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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$36.64

Supplemental Benefit Rate per Hour: \$17.55

Landscaper (Year 3 - 5)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$35.47

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Supplemental Benefit Rate per Hour: \$17.55

Landscaper (up to 3 years)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$32.55

Supplemental Benefit Rate per Hour: \$17.55

Groundperson

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$32.55

Supplemental Benefit Rate per Hour: \$17.55

Tree Remover / Pruner

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$42.51

Supplemental Benefit Rate per Hour: \$17.55

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$30.80

Supplemental Benefit Rate per Hour: \$17.55

Watering - Plant Maintainer

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$24.92

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: 7/1/2023 - 7/2/2023 Wage Rate per Hour: \$57.82

Supplemental Benefit Rate per Hour: \$42.86

Effective Period: 7/3/2023 - 1/14/2024

Wage Rate per Hour: \$58.12

Supplemental Benefit Rate per Hour: \$43.31

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$58.47

Supplemental Benefit Rate per Hour: \$43.71

Marble Finisher

Effective Period: 7/1/2023 - 7/2/2023

Wage Rate per Hour: \$44.77

Supplemental Benefit Rate per Hour: \$40.16

Effective Period: 7/3/2023 - 1/14/2024

Wage Rate per Hour: \$45.10

Supplemental Benefit Rate per Hour: \$40.36

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$45.37

Supplemental Benefit Rate per Hour: \$40.61

Marble Polisher

Effective Period: 7/1/2023 - 7/2/2023

Wage Rate per Hour: \$43.97

Supplemental Benefit Rate per Hour: \$32.76

Effective Period: 7/3/2023 - 1/14/2024

Wage Rate per Hour: \$44.19

Supplemental Benefit Rate per Hour: \$33.11

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$44.40

Supplemental Benefit Rate per Hour: \$33.46

Marble Maintenance Finisher

Effective Period: 7/1/2023 - 7/2/2023

Wage Rate per Hour: \$27.26

Supplemental Benefit Rate per Hour: \$14.55

Effective Period: 7/3/2023 - 1/14/2024

Wage Rate per Hour: \$27.44

Supplemental Benefit Rate per Hour: \$14.77

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$27.56

Supplemental Benefit Rate per Hour: \$15.06

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

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$43.80

Supplemental Benefit Rate per Hour: \$29.39

before calculating premium wage component deduct \$3.00

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$44.70

Supplemental Benefit Rate per Hour: \$29.99

before calculating premium wage component deduct \$3.25

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.

(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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$39.19

Supplemental Benefit Rate per Hour: \$24.60

before calculating premium wage component deduct \$1.50

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$39.70

Supplemental Benefit Rate per Hour: \$24.84

before calculating premium wage component deduct \$1.70

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$28.38

Supplemental Benefit Rate per Hour: \$18.92

before calculating premium wage component deduct \$1.50

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$29.89

Supplemental Benefit Rate per Hour: \$19.16

before calculating premium wage component deduct \$1.70

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)

METALLIC LATHER

Metallic Lather

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$46.45

Supplemental Benefit Rate per Hour: \$52.80

Supplemental Note: For time and one half overtime - \$64.80 For double overtime - \$81.60

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

<u>Millwright</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$58.70

Supplemental Benefit Rate per Hour: \$57.11

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 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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$53.40

Supplemental Benefit Rate per Hour: \$45.67

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$53.57

Supplemental Benefit Rate per Hour: \$46.52

<u> Mosaic Mechanic - Mosaic & Terrazzo Finisher</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$51.79

Supplemental Benefit Rate per Hour: \$45.67

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$51.96

Supplemental Benefit Rate per Hour: \$46.52

Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$51.79

Supplemental Benefit Rate per Hour: \$45.67

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$51.96

Supplemental Benefit Rate per Hour: \$46.52

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

Paid Holidays

Christmas Day

None

(Local #7)

PAINTER

Painter - Brush & Roller

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$43.00

Supplemental Benefit Rate per Hour: \$40.88 Supplemental Note: \$46.62 on overtime

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$46.00

Supplemental Benefit Rate per Hour: \$40.88 Supplemental Note: \$46.62 on overtime

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
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

(District Council of Painters #9)

PAINTER - LINE STRIPING (ROADWAY) see PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)

PAINTER - METAL POLISHER

METAL POLISHER

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$32.93

Supplemental Benefit Rate per Hour: \$11.99

<u> METAL POLISHER - NEW CONSTRUCTION</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$33.88

Supplemental Benefit Rate per Hour: \$11.99

METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$36.43

Supplemental Benefit Rate per Hour: \$11.99

ASSISTANT METAL POLISHER

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$25.71

Supplemental Benefit Rate per Hour: \$11.51

ASSISTANT METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$26.66

Supplemental Benefit Rate per Hour: \$11.51

<u>ASSISTANT METAL POLISHER - SCAFFOLD OVER 34 FEET</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$28.21

Supplemental Benefit Rate per Hour: \$11.51

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.

Holiday Pay

Only employees who have completed one year of service, including any trial period shall be eligible for 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.

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
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

Four Days a week at Ten (10) hours straight a day.

Local 8A-28A

PAINTER - SIGN

Sign Painter

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$45.54

Supplemental Benefit Rate per Hour: \$22.29

Assistant Sign Painter

Effective Period: 7/1/2023 - 6/30/2024

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

(Local #8A-28A)

PAINTER - STRUCTURAL STEEL

Painters on Structural Steel

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$54.50

Supplemental Benefit Rate per Hour: \$51.33

Painter - Power Tool

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$61.00

Supplemental Benefit Rate per Hour: \$51.33

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

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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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$48.02

Supplemental Benefit Rate per Hour: \$40.51

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

Paid Holidays

None

Shift Rates

Christmas Day

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$48.85

Supplemental Benefit Rate per Hour: \$51.87

Supplemental Note: For time and one half overtime - \$56.37 For double overtime - \$60.87

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.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.98

Supplemental Benefit Rate per Hour: \$51.87

Supplemental Note: For time and one half overtime - \$56.37 For double overtime - \$60.87

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$49.45

Supplemental Benefit Rate per Hour: \$51.87

Supplemental Note: For time and one half overtime - \$56.37 For double overtime - \$60.87

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$48.85

Supplemental Benefit Rate per Hour: \$51.87

Supplemental Note: For time and one half overtime - \$56.37 For double overtime - \$60.87

<u>Production Paver & Roadbuilder - Shoveler</u>

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.98

Supplemental Benefit Rate per Hour: \$51.87

Supplemental Note: For time and one half overtime - \$56.37 For double overtime - \$60.87

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
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 $\frac{1}{2}$) 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)

PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)

Striping - Machine Operator

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Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$40.00

Supplemental Benefit Rate per Hour: \$17.27

Supplemental Note: For time and one half overtime - \$18.27 For double overtime - \$19.27

<u>Lineperson (Thermoplastic)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$44.00

Supplemental Benefit Rate per Hour: \$17.27

Supplemental Note: For time and one half overtime - \$18.27 For double overtime - \$19.27

Striping Assistant & Traffic Safety

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$38.00

Supplemental Benefit Rate per Hour: \$17.27

Supplemental Note: For time and one half overtime - \$18.27 For double overtime - \$19.27

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.

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 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)

PLASTERER

<u>Plasterer</u>

Effective Period: 7/1/2023 - 7/31/2023

Wage Rate per Hour: \$52.08

Supplemental Benefit Rate per Hour: \$23.74

Effective Period: 8/1/2023 - 6/30/2024

Wage Rate per Hour: \$52.10

Supplemental Benefit Rate per Hour: \$25.35

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

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: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 1/14/2024

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.

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$73.70

Supplemental Benefit Rate per Hour: \$42.25

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$58.08

Supplemental Benefit Rate per Hour: \$33.08

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$59.04

Supplemental Benefit Rate per Hour: \$33.72

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 (MECHNICAL EQUIPMENT AND SERVICE)

(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

<u>Plumber</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$47.45

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Supplemental Benefit Rate per Hour: \$20.51

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$48.20

Supplemental Benefit Rate per Hour: \$21.36

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

Double time 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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$50.35

Supplemental Benefit Rate per Hour: \$29.73

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$51.19

Supplemental Benefit Rate per Hour: \$30.29

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

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$69.73

Supplemental Benefit Rate per Hour: \$28.48

Overtime

Christmas Day

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

Day after Thanksgiving

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)

Journeyperson

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$61.93

Supplemental Benefit Rate per Hour: \$30.25

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

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. For projects bid and performed after July 1, 2023, the first shift shall be paid at the regular hourly rate plus a 5% differential.

(Bricklayer District Council)

ROOFER

Roofer

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$46.50

Supplemental Benefit Rate per Hour: \$38.31

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

Sheet Metal Worker

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$52.60

Supplemental Benefit Rate per Hour: \$56.93

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$53.60

Supplemental Benefit Rate per Hour: \$58.43

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$42.08

Supplemental Benefit Rate per Hour: \$56.93

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$42.88

Supplemental Benefit Rate per Hour: \$58.43

Sheet Metal Worker - Duct Cleaner

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$19.30

Supplemental Benefit Rate per Hour: \$12.35

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$19.57

Supplemental Benefit Rate per Hour: \$12.72

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.

(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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$49.40

Supplemental Benefit Rate per Hour: \$28.99

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$50.10

Supplemental Benefit Rate per Hour: \$30.04

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

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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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$30.26

Supplemental Benefit Rate per Hour: \$3.80

Shipyard Mechanic - Second Class

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$21.63

Supplemental Benefit Rate per Hour: \$3.30

Shipyard Laborer - First Class

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$23.59

Supplemental Benefit Rate per Hour: \$3.70

Shipyard Laborer - Second Class

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$18.43

Supplemental Benefit Rate per Hour: \$3.43

Shipyard Dockhand - First Class

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$25.82

Supplemental Benefit Rate per Hour: \$3.54

Shipyard Dockhand - Second Class

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$18.83

Supplemental Benefit Rate per Hour: \$3.58

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

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$61.89

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$58.00

Supplemental Benefit Rate per Hour: \$63.44

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$69.05

Supplemental Benefit Rate per Hour: \$53.14

Supplemental Note: Overtime supplemental benefit rate: \$105.54

Steamfitter -Temporary Services

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$52.48

Supplemental Benefit Rate per Hour: \$43.57

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$44.85

Supplemental Benefit Rate per Hour: \$20.71

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$45.10

Supplemental Benefit Rate per Hour: \$21.71

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

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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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$56.15

Supplemental Benefit Rate per Hour: \$53.35

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$48.47

Supplemental Benefit Rate per Hour: \$30.01

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$48.47

Supplemental Benefit Rate per Hour: \$32.36

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

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Paid Holidays

Christmas Day

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: 7/1/2023 - 6/30/2024

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

Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day

Veteran's Day

Thanksgiving Day

Paid Holidays

Christmas Day

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

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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

(C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$48.78

Supplemental Benefit Rate per Hour: \$32.36

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$49.16

Supplemental Benefit Rate per Hour: \$32.56

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.

Overtime Holidays

Double time the regular rate for work on the following holiday(s). New Year's Day

New Ieal 5 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 (1½) 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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$63.46

Supplemental Benefit Rate per Hour: \$35.51

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$63.98

Supplemental Benefit Rate per Hour: \$35.71

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

Thanksgiving Day

Day after Thanksgiving

Shift Rates

Christmas Day

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 (11/4) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

<u>Timberperson</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$54.05

Supplemental Benefit Rate per Hour: \$54.99

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

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 #1556)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$71.86

Supplemental Benefit Rate per Hour: \$63.35

Tunnel Workers (Compressed Air Rates)

Includes shield driven liner plate portions or solidification portions work (8 hour shift) during excavation phase.

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$69.30

Supplemental Benefit Rate per Hour: \$61.35

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$68.14

Supplemental Benefit Rate per Hour: \$60.14

<u>Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$66.78

Supplemental Benefit Rate per Hour: \$59.16

Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$66.78

Supplemental Benefit Rate per Hour: \$59.16

<u>Changehouse Attendant: Powder Watchperson (Compressed Air Rates)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$58.80

Supplemental Benefit Rate per Hour: \$55.51

Blasters (Free Air Rates)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$68.55

Supplemental Benefit Rate per Hour: \$60.82

<u>Tunnel Workers (Free Air Rates)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$65.58

Supplemental Benefit Rate per Hour: \$58.28

All Others (Free Air Rates)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$60.62

Supplemental Benefit Rate per Hour: \$53.94

Microtunneling (Free Air Rates)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$52.46

Supplemental Benefit Rate per Hour: \$46.62

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 8 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
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

(Local #147)

UTILITY LOCATOR

(Locate & mark underground utilities for street excavation.)

Utility Locator (Year 7 and above)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$31.56

Supplemental Benefit Rate per Hour: \$1.43

Utility Locator (Year 5 - 6)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$22.85

Supplemental Benefit Rate per Hour: \$1.43

Utility Locator (Year 4)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$21.54

Supplemental Benefit Rate per Hour: \$1.43

Utility Locator (Year 3)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$20.30

Supplemental Benefit Rate per Hour: \$1.43

Utility Locator (Year 2)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$19.13

Supplemental Benefit Rate per Hour: \$1.43

Utility Locator (Year 1)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$18.04

Supplemental Benefit Rate per Hour: \$1.43

Utility Locator (Up to 1 year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$1.43

Supplemental Note: No benefits for the first 90 days of employment.

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

WELDER AND FIREWATCH TO BE PAID AT THE RATE OF THE JOURNEYPERSON OR REGISTERED APPRENTICE 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.

ADDENDUM

List of Amended Classifications

- 1. BRICKLAYER
- 2. HAZARDOUS MATERIAL HANDLER
- 3. HOUSE WRECKER
- 4. IRON WORKER ORNAMENTAL
- 5. IRON WORKER STRUCTURAL
- 6. MASON TENDER
- 7. MASON TENDER (INTERIOR DEMOLITION WORKER)
- 8. PLUMBER
- 9. SHEET METAL WORKER
- 10. STEAMFITTER REFRIGERATION AND AIR CONDITIONER
- **11. TAPER**

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BOILERMAKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Boilermaker (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 65% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$34.37

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$36.39

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 75% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$38.41

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 80% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$40.40

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 85% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$42.43

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 90% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$44.44

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 95% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$46.46

(Local #5)

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BRICKLAYER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Bricklayer (First 750 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 50% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$22.60

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour:\$23.75

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 60% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$22.60

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 23.75

<u>Bricklayer (Third 750 Hours)</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 70% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$22.60

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$23.75

Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 80% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$22.60

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 80% of Journeyperson's rate Supplemental Benefit Rate Per Hour:\$ 23.75

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2023 - 1/14/2024

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Wage Rate Per Hour: 90% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$22.60

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 90% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$23.75

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 95% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$22.60

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 95% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$23.75

(Bricklayer District Council)

CARPENTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Carpenter (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour For Building Apprentice: \$20.20

Supplemental Benefit Rate Per Hour For Building Apprentice: \$17.25

Wage Rate Per Hour For Heavy Apprentice: \$25.60

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$37.31

Carpenter (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour For Building Apprentice: \$23.20

Supplemental Benefit Rate Per Hour For Building Apprentice: \$18.75

Wage Rate Per Hour For Heavy Apprentice: \$31.20

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$37.31

Carpenter (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour For Building Apprentice: \$27.45

Supplemental Benefit Rate Per Hour For Building Apprentice: \$22.35

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Wage Rate Per Hour For Heavy Apprentice: \$39.58

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$37.31

Carpenter (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour For Building Apprentice: \$35.33

Supplemental Benefit Rate Per Hour For Building Apprentice: \$24.35

Wage Rate Per Hour For Heavy Apprentice: \$47.97

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$37.31

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS

(Ratio of Apprentice to Journeyperson: 1 to 1, 2 to 5)

Carpenter - High Rise (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$18.27

Supplemental Benefit Rate per Hour: \$17.55

<u>Carpenter - High Rise (Second Year)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$24.70

Supplemental Benefit Rate per Hour: \$17.68

Carpenter - High Rise (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$31.28

Supplemental Benefit Rate per Hour: \$17.81

Carpenter - High Rise (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$38.90

Supplemental Benefit Rate per Hour: \$17.96

(Carpenters District Council)

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CEMENT AND CONCRETE WORKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Cement & Concrete Worker (First 1333 hours)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 53% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$14.79

Cement & Concrete Worker (Second 1333 hours)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 69% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$19.72

Cement & Concrete Worker (Last 1334 hours)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 85% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$21.30

(Cement Concrete Workers District Council)

CEMENT MASON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Cement Mason (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$19.92

Supplemental Benefit Rate per Hour: \$15.61

Cement Mason (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$24.82

Supplemental Benefit Rate per Hour: \$15.91

Cement Mason (Third Year)

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Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$30.22

Supplemental Benefit Rate per Hour: \$16.02

(Local #780)

DERRICKPERSON & RIGGER (STONE)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

<u>Derrickperson & Rigger (stone) - First Year</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 1st Six Months

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

<u>Derrickperson & Rigger (stone) - Third Year</u>

Effective Period: 7/1/2023 - 6/30/2024

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)

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Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$25.60

Supplemental Benefit Rate Per Hour: \$37.31

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$31.20

Supplemental Benefit Rate Per Hour: \$37.31

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$39.58

Supplemental Benefit Rate Per Hour: \$37.31

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$47.97

Supplemental Benefit Rate Per Hour: \$37.31

(Carpenters District Council)

ELECTRICIAN

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Electrician (First Term: 0-6 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$16.43
Overtime Supplemental Rate Per Hour: \$17.63

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$17.18

Overtime Supplemental Rate Per Hour: \$18.38

Electrician (First Term: 7-12 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$18.50

Supplemental Benefit Rate per Hour: \$16.69
Overtime Supplemental Rate Per Hour: \$17.92

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$18.50

Supplemental Benefit Rate per Hour: \$17.44

Overtime Supplemental Rate Per Hour: \$18.67

Electrician (Second Term: 0-6 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$19.50

Supplemental Benefit Rate per Hour: \$17.22
Overtime Supplemental Rate Per Hour: \$18.51

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$19.50

Supplemental Benefit Rate per Hour: \$17.97
Overtime Supplemental Rate Per Hour: \$19.26

Electrician (Second Term: 7-12 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$20.50

Supplemental Benefit Rate per Hour: \$17.74
Overtime Supplemental Rate Per Hour: \$19.10

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$20.50

Supplemental Benefit Rate per Hour: \$18.49
Overtime Supplemental Rate Per Hour: \$19.85

Electrician (Third Term: 0-6 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$21.50

Supplemental Benefit Rate per Hour: \$18.27
Overtime Supplemental Rate Per Hour: \$19.69

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$21.50

Supplemental Benefit Rate per Hour: \$19.02
Overtime Supplemental Rate Per Hour: \$20.44

Electrician (Third Term: 7-12 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$22.50

Supplemental Benefit Rate per Hour: \$18.79
Overtime Supplemental Rate Per Hour: \$20.28

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$22.50

Supplemental Benefit Rate per Hour: \$19.54
Overtime Supplemental Rate Per Hour: \$21.03

Electrician (Fourth Term: 0-6 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$19.31
Overtime Supplemental Rate Per Hour: \$20.87

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$20.06
Overtime Supplemental Rate Per Hour: \$21.62

Electrician (Fourth Term: 7-12 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$25.50

Supplemental Benefit Rate per Hour: \$20.36
Overtime Supplemental Rate Per Hour: \$22.05

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$25.50

Supplemental Benefit Rate per Hour: \$21.11
Overtime Supplemental Rate Per Hour: \$22.80

Electrician (Fifth Term: 0-12 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$26.75

Supplemental Benefit Rate per Hour: \$24.13
Overtime Supplemental Rate Per Hour: \$25.82

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$27.50

Supplemental Benefit Rate per Hour: \$24.79
Overtime Supplemental Rate Per Hour: \$26.52

Electrician (Fifth Term: 13-18 Months)

Effective Period: 7/1/2023 - 4/12/2024

Wage Rate per Hour: \$31.25

Supplemental Benefit Rate per Hour: \$26.55

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Overtime Supplemental Rate Per Hour: \$28.53

Effective Period: 4/13/2024 - 6/30/2024

Wage Rate per Hour: \$32.00

Supplemental Benefit Rate per Hour: \$27.20 Overtime Supplemental Rate Per Hour: \$29.23

Overtime Description

Overtime Wage paid at time and one half the regular rate

(Local #3)

ELEVATOR CONSTRUCTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator (Constructor) - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$34.18

Elevator (Constructor) - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$34.79

Elevator (Constructor) - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$36.01

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$37.23

(Local #1)

ELEVATOR REPAIR & MAINTENANCE

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Per Hour: \$34.59

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Benefit Per Hour: \$35.18

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Per Hour: \$36.37

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

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

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$27.47

Supplemental Benefit Rate per Hour: \$32.38

Engineer - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$34.34

Supplemental Benefit Rate per Hour: \$32.38

Engineer - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$37.77

Supplemental Benefit Rate per Hour: \$32.38

Engineer - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$41.21

Supplemental Benefit Rate per Hour: \$32.38

(Local #15)

ENGINEER - OPERATING

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Operating Engineer - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 40% of Operating Engineer - Road & Heavy Construction V's Rate

Supplemental Benefit Per Hour: \$25.55

Operating Engineer - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Operating Engineer - Road & Heavy Construction V's Rate

Supplemental Benefit Per Hour: \$25.55

Operating Engineer - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 60% of Operating Engineer - Road & Heavy Construction V's Rate

Supplemental Benefit Per Hour: \$25.55

(Local #14)

FLOOR COVERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Floor Coverer (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$25.20

Supplemental Benefit Rate per Hour: \$17.25

Floor Coverer (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$28.20

Supplemental Benefit Rate per Hour: \$18.75

Floor Coverer (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$32.45

Supplemental Benefit Rate per Hour: \$22.35

Floor Coverer (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$40.33

Supplemental Benefit Rate per Hour: \$24.35

(Carpenters District Council)

GLAZIER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Glazier (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Glazier (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Glazier (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Glazier (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$20.00

Supplemental Benefit Rate per Hour: \$14.75

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$20.00

Supplemental Benefit Rate per Hour: \$15.35

Handler (Second 1000 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$21.00

Supplemental Benefit Rate per Hour: \$14.75

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$21.00

Supplemental Benefit Rate per Hour: \$15.35

Handler (Third 1000 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$24.00

Supplemental Benefit Rate per Hour: \$14.75

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$24.00

Supplemental Benefit Rate per Hour: \$15.35

Handler (Fourth 1000 Hours)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$26.00

Supplemental Benefit Rate per Hour: \$14.75

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$26.00

Supplemental Benefit Rate per Hour: \$15.35

(Local #78)

HEAT & FROST INSULATOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Heat & Frost Insulator (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

(Local #12)

HOUSE WRECKER (TOTAL DEMOLITION)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

House Wrecker - First Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$21.30

Supplemental Benefit Rate per Hour: \$10.97

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$21.55

Supplemental Benefit Rate per Hour: \$11.27

House Wrecker - Second Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$23.05

Supplemental Benefit Rate per Hour: \$10.97

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$23.30

Supplemental Benefit Rate per Hour: \$11.27

House Wrecker - Third Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$24.55

Supplemental Benefit Rate per Hour: \$10.97

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$24.80

Supplemental Benefit Rate per Hour: \$11.27

House Wrecker - Fourth Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$27.05

Supplemental Benefit Rate per Hour: \$10.97

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$27.30

Supplemental Benefit Rate per Hour: \$11.27

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Iron Worker (Ornamental) - First Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$25.98

Supplemental Benefit Rate per Hour: \$16.00

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$26.45

Supplemental Benefit Rate per Hour: \$16.00

Iron Worker (Ornamental) - Second Year

Effective Period: 7/1/2023 - 1/23/2024

Wage Rate per Hour: \$28.45

Supplemental Benefit Rate per Hour: \$18.00

Effective Period: 1/24/2024 - 6/30/2024

Wage Rate per Hour: \$28.97

Supplemental Benefit Rate per Hour: \$18.00

Iron Worker (Ornamental) - Third Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$30.80

Supplemental Benefit Rate per Hour: \$19.00

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$31.36

Supplemental Benefit Rate per Hour: \$19.00

Iron Worker (Ornamental) - Fourth Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$34.39

Supplemental Benefit Rate per Hour: \$21.00

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$35.02

Supplemental Benefit Rate per Hour: \$21.00

(Local #580)

IRON WORKER - STRUCTURAL

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$29.73

Supplemental Benefit Rate per Hour: \$60.12

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$29.98

Supplemental Benefit Rate per Hour: \$61.01

<u>Iron Worker (Structural) - 7- 18 Months</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$30.33

Supplemental Benefit Rate per Hour: \$60.12

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$30.58

Supplemental Benefit Rate per Hour: \$61.01

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$30.94

Supplemental Benefit Rate per Hour: \$60.12

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$31.19

Supplemental Benefit Rate per Hour: \$61.01

(Local #40 and #361)

LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON)

(Ratio Apprentice to Journeyperson: 1 to 1, 1 to 3)

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - First</u> 1000 hours

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$50.43

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -</u> Second 1000 hours

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$50.43

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -</u> Third 1000 hours

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$50.43

<u>Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Rate Per Hour: \$50.43

(Local #731)

MARBLE MECHANICS

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Cutters & Setters - Second 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 45% of Journeyperson's rate

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

<u>Cutters & Setters - Fourth 750 Hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Cutters & Setters - Seventh 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Cutters & Setters - Eighth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Cutters & Setters - Ninth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Cutters & Setters - Tenth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

Polishers & Finishers - First 900 Hours

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

Polishers & Finishers - Third 900 Hours

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$21.80

Supplemental Benefit Rate per Hour: \$10.47

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$22.05

Supplemental Benefit Rate per Hour: \$10.77

Mason Tender - Second Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$23.55

Supplemental Benefit Rate per Hour: \$10.47

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$23.80

Supplemental Benefit Rate per Hour: \$10.77

Mason Tender - Third Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$25.05

Supplemental Benefit Rate per Hour: \$10.47

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$25.30

Supplemental Benefit Rate per Hour: \$10.77

Mason Tender - Fourth Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$27.55

Supplemental Benefit Rate per Hour: \$10.47

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$27.80

Supplemental Benefit Rate per Hour: \$10.77

(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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$20.70

Supplemental Benefit Rate per Hour: \$10.82

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$21.30

Supplemental Benefit Rate per Hour: \$10.97

Mason Tender (Interior Demolition) - Second Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$22.65

Supplemental Benefit Rate per Hour: \$10.82

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$23.05

Supplemental Benefit Rate per Hour: \$10.97

<u> Mason Tender (Interior Demolition) - Third Year</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$24.15

Supplemental Benefit Rate per Hour: \$10.82

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$24.55

Supplemental Benefit Rate per Hour: \$10.97

Mason Tender (Interior Demolition) - Fourth Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$26.65

Supplemental Benefit Rate per Hour: \$10.82

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$27.05

Supplemental Benefit Rate per Hour: \$10.97

(Local #79)

METALLIC LATHER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metallic Lather (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$22.55

Supplemental Benefit Rate per Hour: \$17.87

Metallic Lather (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$23.60

Supplemental Benefit Rate per Hour: \$16.87

Metallic Lather (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$24.60

Supplemental Benefit Rate per Hour: \$15.92

Metallic Lather (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$37.18

Supplemental Benefit Rate per Hour: \$21.82

(Local #46)

MILLWRIGHT

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Millwright (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$31.74

Supplemental Benefit Rate per Hour: \$36.74

Millwright (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$37.19

Supplemental Benefit Rate per Hour: \$40.44

Millwright (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$42.64

Supplemental Benefit Rate per Hour: \$44.79

Millwright (Fourth Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$53.54

Supplemental Benefit Rate per Hour: \$51.55

(Local #740)

PAINTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painter - Brush & Roller - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$17.20

Supplemental Benefit Rate per Hour: \$18.26

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$21.50

Supplemental Benefit Rate per Hour: \$23.46

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$25.80

Supplemental Benefit Rate per Hour: \$27.72

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$34.40

Supplemental Benefit Rate per Hour: \$35.83

(District Council of Painters)

PAINTER - METAL POLISHER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metal Polisher (First Year)

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$17.00

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: 7/1/2023 - 6/30/2024

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 Journeyperson: 1 to 1, 1 to 3)

Painters - Structural Steel (First Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Painters - Structural Steel (Second Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Painters - Structural Steel (Third Year)

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #806)

PAVER AND ROADBUILDER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$30.86

Supplemental Benefit Rate per Hour: \$25.54

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$32.50

Supplemental Benefit Rate per Hour: \$25.54

(Local #1010)

PAVER AND ROADBUILDER - LINE STRIPING (ROADWAY)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

<u>Paver and Roadbuilder - Line Striping (Roadway) - First Year (Minimum 1000 hours)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$30.86

Supplemental Benefit Rate per Hour: \$17.27

<u>Paver and Roadbuilder - Line Striping (Roadway) - Second Year (Minimum 1000 hours)</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$32.50

Supplemental Benefit Rate per Hour: \$17.27

(Local #1010)

PLASTERER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

(Each Term is 800 Hours.)

Plasterer - First Term

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$17.48

Plasterer - Second Term

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$18.63

Plasterer - Third Term

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$20.93

<u> Plasterer - Fourth Term</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 75% of Journeyperson'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: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$21.45

Supplemental Benefit Rate per Hour: \$10.32

Plasterer Tender - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$23.40

Supplemental Benefit Rate per Hour: \$10.32

Plasterer Tender - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$24.90

Supplemental Benefit Rate per Hour: \$10.32

Plasterer Tender - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$16.78

Supplemental Benefit Rate per Hour: \$5.43

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$19.00

Supplemental Benefit Rate per Hour: \$5.43

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$19.78

Supplemental Benefit Rate per Hour: \$6.43

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$21.00

Supplemental Benefit Rate per Hour: \$6.43

Plumber - Second Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$28.99

Supplemental Benefit Rate per Hour: \$21.95

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$29.59

Supplemental Benefit Rate per Hour: \$22.35

Plumber - Third Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$31.09

Supplemental Benefit Rate per Hour: \$21.95

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$31.69

Supplemental Benefit Rate per Hour: \$22.35

Plumber - Fourth Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$33.94

Supplemental Benefit Rate per Hour: \$21.95

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$34.54

Supplemental Benefit Rate per Hour: \$22.35

<u>Plumber - Fifth Year: 1st Six Months</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$35.34

Supplemental Benefit Rate per Hour: \$21.95

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$35.94

Supplemental Benefit Rate per Hour: \$22.35

<u> Plumber - Fifth Year: 2nd Six Months</u>

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$47.41

Supplemental Benefit Rate per Hour: \$21.95

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$48.01

Supplemental Benefit Rate per Hour: \$22.35

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER

(Exterior Building Renovation)

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$31.48

Supplemental Benefit Rate per Hour: \$15.00

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$35.54

Supplemental Benefit Rate per Hour: \$20.20

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$41.14

Supplemental Benefit Rate per Hour: \$23.95

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate per Hour: \$49.50

Supplemental Benefit Rate per Hour: \$24.95

(Bricklayer District Council)

ROOFER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Roofer - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 35% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$3.97

Roofer - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$19.29

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Roofer - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 60% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$23.09

Roofer - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 75% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$28.81

(Local #8)

SHEET METAL WORKER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Sheet Metal Worker (0-6 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 25% of Journeyperson's rate

Supplemental Rate Per Hour: \$7.19

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 25% of Journeyperson's rate

Supplemental Rate Per Hour: \$7.64

Sheet Metal Worker (7-18 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$20.98

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$21.49

Sheet Metal Worker (19-30 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$28.41

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$29.09

Sheet Metal Worker (31-36 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$33.59

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$34.41

Sheet Metal Worker (37-42 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$33.59

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$34.41

Sheet Metal Worker (43-48 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$41.37

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$42.42

Sheet Metal Worker (49-54 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$41.37

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$42.42

Sheet Metal Worker (55-60 Months)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$46.56

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$47.76

(Local #28)

SIGN ERECTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$17.84

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$20.25

Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$22.66

Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$25.09

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$33.83

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$36.81

<u>Sign Erector - Fourth Year: 1st Six Months</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$40.63

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$43.70

Sign Erector - Fifth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$46.76

Sign Erector - Sixth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$49.80

(Local #137)

STEAMFITTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Steamfitter - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

<u> Steamfitter - Second Year</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

<u> Steamfitter - Third Year</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate and Supplemental Rate per Hour: 60% of Journeyperson's rate.

Steamfitter - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate and Supplemental Rate Per Hour: 70% of Journeyperson's rate.

Steamfitter - Fifth Year

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$21.71

Supplemental Benefit Rate per Hour: \$13.75

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$21.83

Supplemental Benefit Rate per Hour: \$14.31

Refrigeration & Air Conditioner (Second Year)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$26.21

Supplemental Benefit Rate per Hour: \$15.09

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$26.36

Supplemental Benefit Rate per Hour: \$15.73

Refrigeration & Air Conditioner (Third Year)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$30.53

Supplemental Benefit Rate per Hour: \$16.49

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$30.70

Supplemental Benefit Rate per Hour: \$17.21

Refrigeration & Air Conditioner (Fourth Year)

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$36.87

Supplemental Benefit Rate per Hour: \$18.38

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$37.08

Supplemental Benefit Rate per Hour: \$19.22

(Local #638-B)

STONE MASON - SETTER

(Ratio Apprentice of Journeyperson: 1 to 1, 1 to 2)

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

<u> Stone Mason - Setters - Third 750 Hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Fourth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Fifth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Sixth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

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: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$20.97

Supplemental Benefit Rate per Hour: \$14.25

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$21.41

Supplemental Benefit Rate per Hour: \$13.85

Drywall Taper - Second Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$24.24

Supplemental Benefit Rate per Hour: \$21.26

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$24.24

Supplemental Benefit Rate per Hour: \$23.11

Drywall Taper - Third Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$29.08

Supplemental Benefit Rate per Hour: \$23.01

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$29.08

Supplemental Benefit Rate per Hour: \$24.96

Drywall Taper - Fourth Year

Effective Period: 7/1/2023 - 1/14/2024

Wage Rate per Hour: \$38.78

Supplemental Benefit Rate per Hour: \$26.51

Effective Period: 1/15/2024 - 6/30/2024

Wage Rate per Hour: \$38.78

Supplemental Benefit Rate per Hour: \$28.66

(Local #1974)

TILE LAYER - SETTER

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

<u>Tile Layer - Setter - First 750 Hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour:35% of Journeyperson's rate

Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour 40% of Journeyperson's rate

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

<u>Tile Layer - Setter - Fourth 750 Hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

<u>Tile Layer - Setter - Fifth 750 Hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

<u>Tile Layer - Setter - Seventh 750 Hours</u>

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Tile Layer - Setter - Eighth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Tile Layer - Setter - Ninth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

Tile Layer - Setter - Tenth 750 Hours

Effective Period: 7/1/2023 - 6/30/2024

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

TIMBERPERSON

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Timberperson - First Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$23.42

Supplemental Rate Per Hour: \$37.27

Timberperson - Second Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$28.53

Supplemental Rate Per Hour: \$37.27

Timberperson - Third Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$36.18

Supplemental Rate Per Hour: \$37.27

Timberperson - Fourth Year

Effective Period: 7/1/2023 - 6/30/2024

Wage Rate Per Hour: \$43.84

Supplemental Rate Per Hour: \$37.27

(Local #1536)



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



DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN

VOLUME 2 OF 3

PROJECT ID: SANDHWSIB

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK

Together With All Work Incidental Thereto BOROUGH OF STATEN ISLAND CITY OF NEW YORK

| | Contractor |
|--|----------------------------|
| Dated | |
| APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY | |
| | Acting Corporation Counsel |
| Dated | |



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: |
| DDC CLIENT AGENCY: DEPARTMENT OF TRANSPORTATION |
| |
| DEPARTMENT OF TRANSPORTATION |
| DEPARTMENT OF TRANSPORTATION PREPARED BY: |
| DEPARTMENT OF TRANSPORTATION PREPARED BY: |



FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID:SANDHWSIB

SCHEDULE A
SPECIFICATIONS AND
REVISIONS TO STANDARD
SPECIFICATIONS

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK

TOGETHER WITH ALL WORK INCIDENTAL THERETO
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK



CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: February 29, 2024; between 8:30am and 11:00am

BID OPENING DATE/ TIME: February 29, 2024; 11:30am

PROJECT No.: SANDHWSIB

TITLE: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/

SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK,

BOROUGH OF STATEN ISLAND

| | NO. OF | | APPROVED BY: | |
|--------------------------|--------|------------|--------------|--------------------|
| ADDENDA ISSUED | DWG | DATE | SPECS UNIT | GENERAL
COUNSEL |
| #1 | | | | |
| Revised Bid Opening Date | 0 | 02/20/2024 | | |
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THE CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

02/20/2024

ADDENDUM No. # 1

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85024B0016-SANDHWSIB

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

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 above scheduled for February 21, 2024, at 11:30 am is rescheduled to February 29, 2024, at 11:30 am
- 2. Bidders Questions and Responses to Questions:
 No Attachment A is included with this Addendum.
- Revisions to Documents:
 No Attachment B is included with this Addendum.
- 4. Revisions to PASSPort forms:
 Attachment C is included with this Addendum.

<u>Transferring Data Between Rounds of an RFX:</u> 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 projectinguiries@ddc.nyc.gov.

Richard Jones, PE CWI

Chief Engineer, Executive- Engineering Services

PROJECT NAME: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE

INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

PROJECT NAME: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE

INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT B - REVISIONS TO THE DOCUMENTS

<u>PROJECT NAME:</u> RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

<u>ATTACHMENT C - REVISIONS TO PASSPORT FORMS</u>

This Addendum is included within Round 1 of the procurement.

Please note that numbering of addenda is independent of rounds.

Bid Opening Date Changes:

The Bid Opening for the contract described above scheduled for February 21, 2024, at 11:30 am is rescheduled to February 29, 2024, at 11:30 am

Questionnaire Changes:

None

Item Grid Changes:

CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: March 06, 2024; between 8:30am and 11:00am

BID OPENING DATE/ TIME: March 06, 2024; 11:30am

PROJECT No.: SANDHWSIB

TITLE: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/

SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK,

BOROUGH OF STATEN ISLAND

| | NO. OF
DWG | DF DATE | APPROVED BY: | |
|---|---------------|------------|--------------|--------------------|
| ADDENDA ISSUED | | | SPECS UNIT | GENERAL
COUNSEL |
| #1 Revised Bid Opening Date | 0 | 02/20/2024 | | |
| #2 Revised Bid Opening Date; Questions from Bidders and Responses to Questions; Revisions to Documents; Revisions to PASSPort Forms | 7 | 02/28/2024 | | Vani Nayyar |
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THE CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

02/28/2024

ADDENDUM No. # 2

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85024B0016-SANDHWSIB

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

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 above scheduled for February 29, 2024, at 11:30 am is rescheduled to March 06, 2024, at 11:30 am
- 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.

<u>Transferring Data Between Rounds of an RFX:</u> 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 projectinguiries@ddc.nyc.gov.

Richard Jones, PE CWI
Chief Engineer, Executive- Engineering Services

PROJECT NAME: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

| No. | Bidders Questions | DDC Responses |
|-----|---|--|
| 1 | Please provide a layout for the timber piles on the outfall structure | Piles spacing for the 42" Sewer Outfall, including headwall is shown on sheet 11. For all other requirements and details refer to NYC DEP Sewer Design Standards, sheet SE 6, for 42" diameter reinforced concrete pipe on piles. |
| 2 | Please provide depths for the timber piles. | Piles are to be driven to an allowable bearing capacity of twenty (20) tons. See section 70.11.3 General Pile Installation Provisions, paragraph (D)-Driving and or/Installation of Piles, sub-paragraph (12) Refusal, of NYCDEP Sewer and Water Main Specifications (August 8, 2022) |
| 3 | We respectfully request an RFI and bid deadline extension of two weeks. | Refer to Attachment C herein this Addendum. |
| 4 | Sheet 5 plan view indicates as 83' | Outfall pay limit is indicated on sheet 7 sewer profile as 70'+/-and sheet 11R. |
| 5 | Sheet 7 plan view indicates as 83'. | Refer to the response to Question #4 above. |
| 6 | Sheet 7 profile as +/- 70'. | Refer to the response to Question #4 above |
| 7 | Sheet 11 plan as 69'-6 | Refer to the response to Question #4 above |
| 8 | Sheet 11 section B-B – what is thickness of slope pavement of 300-500 Lbs stone? | 2.0 feet. Please refer to the revised Contract Drawing Sheet 11R |
| 9 | A) Sheet 11 provides for two sections marked as B-B. One of B-B calls for MC12X50 – is it part of sheeting or outfall? B) How is it paid? C) Same detail calls for welding at ALL contact points but at the same time limits it to 2" – please clarify extent of the welding. | A) This section B-B is part of Detail "A" and is part of the permanent steel sheet pile. See revised sheet 11R B) No separate payment. Cost to be included in all items of bid. See revised sheet 11R C) Both MC 12x50 channel will be welded at all contact points. See revised sheet 11R |
| 10 | NYC DOT stipulations call for restoring all travel lanes after work hours. Please complement sheet 16 accordingly for off hours MPT layout. | The MPT scheme is intended to provide a general guide – see General MPT Note |
| 11 | Sheet 5 section a-a mark top and bottom stone layers as 70.71RR – please confirm or revise. | Top and bottom stone layers are to be paid under item 70.71 RR Rip Rap |

| No. | Bidders Questions | DDC Responses |
|-----|--|---|
| 12 | Cannot find any references to US Department of Army permit application – is it required? Similar is for NYS DEC Tidal Wetland permit. Were drawings reviewed by these agencies - for example sheet 12 provides for no turbidity barriers – is it correct? Is silt fence is a proper substitute for turbidity barriers? | DDC has submitted a Joint Permit Application to NYSDEC for disturbance in the wetlands. DDC OEHS's consultant is in the process of responding to a Notice of Incomplete Application and DDC will provide a copy of the NYSDEC permit when available. Army Corp of Engineers has issued a permit for the project on 11/3/2023 stating that the work could proceed under NWP-7. The proposed E&SC Plans presented in Sheet 12 were prepared in coordination with NYSDEC during review of the Joint Permit Application. Any deviations from this design would need to comply with the current version of the NYSDEC Blue Book. |
| 13 | Sheet 7 calls for existing outfall/boulder sewer to be removed – please provide exact scope for this requirement. What is boulder sewer? | Refer revised sheet 5R – Call out should read,
"The exiting boulders and outfall sewer to be removed." |
| 14 | Sheet 5 section a-a calls for 2 tons stone under item 70.71RR – as per 26.02 it is 2.5" to 18" stone. Please revise pay item as necessary. Sheet 13 rip rap table calls for D50 as 30" stone and Dmax as 45". Please reconcile with 26.02 stone definition. | Provide 2 ton stones as noted on contract drawings, to be paid for under item 71.71RR. |
| 15 | Sheet 12 note 25 – what are mitigation design plans to be submitted to DEC? Based on what requirements? | In consultation with NYSDEC, DDC is developing offsite wetlands restoration plans which will be submitted to NYSDEC addressing potential disturbances to State and Federal tidal wetlands. While no onsite mitigation design is required, the contractor is advised to review proposed mitigation measures presented in the Joint Permit Application and Environmental Assessment Statement Negative Declaration. The proposed wetland restoration under Contract HWR1140A includes restoring approximately 2 acres of tidal wetlands at the Brookfield Park Restoration Site in the western portion of Brookfield Park, which would mitigate for tidal wetland impacts for Capital Project HWR1140A as well as for wetland impacts under SANDHWSIB. Design of this offsite mitigation is outside of the scope of the SANDHWSIB contract. |

| No. | Bidders Questions | DDC Responses |
|-----|--|--|
| 16 | Sheet 5 section a-a – where is it applicable – | Refer revised sheet 5R. See location of section a-a |
| | is it all around sheet piles? Intent is not clear. | on plan. Refer to Note A. |
| 17 | Sheet 9 note 1 – what is concrete wall to be | Sheet pile cap is paid under item 4.06. See revised |
| | paid under 4.06? | notes 1, 2 & 7 on sheet 9R |
| 18 | Sheet piles ASTM 690 Gr60 – based on | Please refer to Attachment B for revised drawings |
| | manufacturer data it is made as GR50 only. | and specifications. |
| 19 | Sheet 7 - please provide dimensioned plan | Refer to revised sheet 5R for Huguenot Avenue |
| | for sheet pile wall for takeoff purposes. | sheet pile wall. Location is shown on the plan |
| | | depth indicated in section A-A. |
| 20 | Item 4.02 CA and Item 4.02 CB seem to | Please refer to Bid Booklet Vol. 3 of 3, SW- |
| | cover the same work. Please clarify | PAGES→ SW-6, subsection (7) (E), paragraph |
| 21 | how/where each of these items will be used. | (3i) |
| 21 | Does the 42" RCP outfall require a TV | Refer to Section 53.11.1 – Television Inspection |
| | inspection? | and Digital Audio-Visual Recording of Sewers, of NYCDEP Sewer and Water Main Specifications, |
| | | dated August 8, 2022. |
| 22 | PZ26 is not rolled in Gr60. It is rolled Gr 50. | Please refer to Attachment B for revised drawings |
| | Please provide minimum section modulus | and specifications |
| | required for Gr 60 sheet OR Gr 50 sheet. | and specifications |
| | required for all as allest art areas allest. | |
| 23 | SECTION 51.61 – OUTFALL STRUCTURES | The boulders in the Rock RipRap Outlet protection |
| | par. 51.61.4 PRICE TO COVER includes | shown on sheets 5R, 7R, and 13 are the aprons |
| | boulders for aprons and protections. What | and protections included in item 51.61F000. Other |
| | are boulders for aprons and protections as | rock protection is paid as shown on the contract |
| | pertain to this design if any? | drawings. |
| 24 | DEP spec SECTION 51.61 par. 51.61.5 calls | As shown on the Contract drawings, this will be |
| | for "Payment for the cost of furnishing and | paid for under items 4.06 and 4.14 |
| | placing concrete and steel reinforcing bars | |
| | required to construct Concrete Caps atop | |
| | Steel or Composite Sheet Piling Bulkheads | |
| | must be made under Item No. 73.21AC - | |
| | ADDITIONAL CONCRETE, and Item No. | |
| | 73.51AS - ADDITIONAL STEEL | |
| | REINFORCING BARS." Sheet 9 notes 1 | |
| | and 2 call for different pay items. Please | |
| | reconcile. | |

| No. | Bidders Questions | DDC Responses |
|-----|---|---|
| 25 | Please confirm that project in general and sheet 12 specifically follow requirements of section 9.30. Existing outfall is MS4 outfall which could require both DEC and DEP permits. | Based upon the proposed improved under SANDHWSIB, overall soil disturbance if anticipated to be under DEP permit thresholds. Contractor to confirm areas of disturbance based upon proposed construction methods and/or deviations from design plan to determine applicability of both NYSDEC and DEP stormwater discharge during construction permit requirements. |
| 26 | Please confirm the project duration takes into account time necessary for obtaining all necessary permits. | Project duration takes into account a reasonable amount of time for the contractor to obtain all necessary permits. |
| 27 | Spec section 9.30 – according to par. 9.30.1 this section is not applicable to the project unless department determined that DEC permit is required. Please provide determination or remove from the project requirements. This section is silent on any requirements imposed by DEP Unified stormwater rules - are they applicable? Please advise. | Refer to the response to Question #25 above.
Spec Section 9.30 would be applicable if a permit
is required. |
| 28 | Please provide a detail for the grouted stone pavement | See Outfall Plan and Section B-B on sheet 11R |
| 29 | Please provide a detail for the slope pavement | Refer to the response to Question #28 above. |
| 30 | Sheet 11 section B-B calls for 2'-6" rip rap. Sheet 5 section a-a calls for rip rap of sizes 30"-36". Same section indicates rip rap as 100-300 lbs stone. Please reconcile stone sizes definition and modify pay items accordingly as well as different size stone cost differently to purchase and install. | Refer to the response to Question #14 above. |
| 31 | Please provide any other boring logs with higher depths and blow counts to determine the depth of the piles. | All borings information has been included in the contract documents. |
| 32 | NYC DDC publications do not provide for revised spec section 9.30 dated 10/2/23. | The specification in Volume 3, I-Pages governs |
| 33 | Based on updated 9.30 posted in the project bid booklet which incorporated NYC DEP SWPPP requirement into this section please provide your estimate of the area of disturbance and determination if revised section 9.30 is applicable to this project. If applicable please void my RFI about spec section 9.30. | Refer to the response to Question #25 above.
Spec Section 9.30 would be applicable if a permit
is required. |

| No. | Bidders Questions | DDC Responses |
|-----|--|--|
| 34 | Drawings do not provide complete layout of ROW lines as well as adjacent properties lines. What are boundaries of the DPR parkland? Without this information the necessity of DPR Construction Permit cannot be ascertained. | See Wolfe's Pond Park limits on sheets 5R, 6R, 7R & 8R. |
| 35 | Were contract drawings reviewed and approved by NYC DPR? Same question is for other appropriate regulatory agencies. | Yes |
| 36 | Section 51.61.4 of the NYC DEP Standard Specifications states that permanent steel sheet piling within the pay limits of the outfall shall be included in the price bid for the Outfall. The limit of the outfall is aligned with the steel sheet piling. Section 51.61.5 does not state that sheet piling is paid separately. Please confirm that all permanent steel sheet piling shown on Huguenot Ave is outside of the pay limits of the outfall and will be paid under Item 9.91 A | All permanent sheet piling is paid for under item 9.91A. All temporary sheet piling is included in the price bid for item 51.61F000. |
| 37 | In reviewing the plans for the aforementioned contract, does the agency have borings or the anticipated depth of the timber piles? | Refer to the response to Question #31 above. |

PROJECT NAME: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT B - REVISIONS TO THE DOCUMENTS

- 1) Contract Drawings: Sheet 1AR,5R,6R,7R,8R,9R and 11R are Revised.
- 2) Revised Bid-schedule: Updated Bid Schedule: Item 70.71RR and 9.91A - Quantities Revised
- 3) VOLUME 3 OF 3:
 - A) I-Page → I-76 Section 9.91 A.5 Material → Grade 60 to Grade 50
 - → I-77 Section 9.91A.6. Method → NYC DEP Standard Sewer and Water Main Specification—changed from July 2014 to August 2022
 - B) SW-Page → SW-7 → Corrected Sequence 71.41.4 E (3)

<u>PROJECT NAME:</u> RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT C - REVISIONS TO PASSPORT FORMS

This Addendum initiates Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Bid Opening Date Changes:

The Bid Opening for the contract described above scheduled for February 29, 2024, at 11:30 am is rescheduled to March 06, 2024, at 11:30 am

Questionnaire Changes:

Revised Bid-schedule: Updated Bid Schedule: Item 70.71RR and 9.91A - - Quantities Revised

Item Grid Changes:

CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

ADDENDA CONTROL SHEET

BID SUBMISSION DATE/ TIME: March 11, 2024; between 8:30am and 11:00am

BID OPENING DATE/ TIME: March 11, 2024; 11:30am

PROJECT No.: SANDHWSIB

TITLE: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE

INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

| | NO. OF | APPROVED BY: | | |
|---|--------|--------------|------------|--------------------|
| ADDENDA ISSUED DWG | | DATE | SPECS UNIT | GENERAL
COUNSEL |
| #1
Revised Bid Opening Date | 0 | 02/20/2024 | | |
| #2 Revised Bid Opening Date; Questions from Bidders and Responses to Questions; Revisions to Documents; Revisions to PASSPort Forms | 7 | 02/26/2024 | | |
| #3 Revised Bid Opening Date | 0 | 03/06/2024 | | |
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THE CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

03/06/2024

ADDENDUM No. #3

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

85024B0016-SANDHWSIB

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

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 above scheduled for March 06, 2024, at 11:30 am is rescheduled to March 11, 2024, 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:

Attachment C is included with this Addendum.

<u>Transferring Data Between Rounds of an RFX:</u> 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
Chief Engineer, Executive- Engineering Services

PROJECT NAME: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE

INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT A - BIDDERS QUESTIONS AND DDC RESPONSES

PROJECT NAME: RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE

INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

ATTACHMENT B - REVISIONS TO THE DOCUMENTS

<u>PROJECT NAME:</u> RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/ SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK, BOROUGH OF STATEN ISLAND

<u>ATTACHMENT C - REVISIONS TO PASSPORT FORMS</u>

This Addendum is included within Round 2 of the procurement.

Please note that numbering of addenda is independent of rounds.

Bid Opening Date Changes:

The Bid Opening for the contract described above scheduled for March 06, 2024, at 11:30 am is rescheduled to March 11, 2024, at 11:30 am

Questionnaire Changes:

None

Item Grid Changes:

VOLUME 3 OF 3

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| R-PAGES | REVISIONS TO STANDARD SPECIFICATIONS |
| I-PAGES | NEW SECTION |
| S-PAGES | SPECIAL PROVISIONS PAGES |
| FM-PAGES | FEDERAL EMERGENCY MANAGEMENT AGENCY PROJECTS |
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(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 Construction

Online 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 Signals

For 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, March 27, 2023
 - 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
- 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

| INFORMATION FOR BIDDERS SECTION 26 BID SECURITY | Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more. |
|--|---|
| The Contractor shall obtain a bid security in the amount indicated to the right. | Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount |
| INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS | Required for contracts in the amount of \$1,000,000 or more. |
| The Contractor shall obtain performance and payment bonds in the amount indicated to the right. | Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price. |
| INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS | ■ Project Safety Representative |
| The Contractor shall provide the safety personnel as indicated to the right. | ☐ Dedicated, full-time Project Safety Manager |
| CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION | Cao Dago CA 4 |
| The Contractor shall substantially complete the Work in the number of calendar days indicated to the right. | See Page SA-4 |
| CONTRACT ARTICLE 15 LIQUIDATED DAMAGES | |
| 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. | \$3250 for each consecutive calendar day over substantial completion time |
| CONTRACT ARTICLE 17. SUB-CONTRACTOR The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price indicated to the right. | Not to exceed 49 % of the Contract price |

| CONTRACT ARTICLE 21. | |
|--|--|
| <u>RETAINAGE</u> | 5 % of the value of the Work |
| The Commissioner shall deduct and retain until | 3 70 of the value of the vvoice |
| the substantial completion of the Work the percent | |
| value of the Work indicated to the right. | |
| CONTRACT ARTICLE 22. | See pages SA-5 through SA-12 |
| (Per Directions Below) | and pages on a uneagn on the |
| CONTRACT ARTICLE 24. | |
| DEPOSIT GUARANTEE | |
| As assurity for the faithful performance of its | |
| As security for the faithful performance of its obligations, the Contractor , upon filing its | 1% of Contract price |
| requisition for payment on Substantial | 1 70 Of Contract price |
| Completion, shall deposit with the Commissioner | |
| a sum equal to the percentage of the Contract | |
| price indicated to the right. | |
| CONTRACT ARTICLE 24. | |
| PERIOD OF GUARANTEE | Eighteen (18) Months, excluding Trees |
| | |
| Periods of maintenance and guarantee other than | Twenty-four (24) Months for Tree |
| the period set forth in Article 24.1 are indicated to | Planting |
| the right. | |
| CONTRACT ARTICLE 75. | |
| COMPENSATION TO BE PAID TO CONTRACTOR | Amount for which the Contract was |
| The City shall pay and the Contractor shall accept | Awarded: |
| 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 | Dollars |
| the Contract was awarded to the Contractor at a | |
| public letting thereof, based upon the Contractor's | (\$) |
| bid for the Contract. | |
| CONTRACT ARTICLE 79. | |
| PARTICIPATION BY MINORITY-OWNED AND | See M/WBE Utilization Plan in |
| WOMEN-OWNED BUSINESS ENTERPRISES IN CITY | PASSPort |
| <u>PROCUREMENT</u> | |

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.40 LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE

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.

\$ 8<u>00.00</u> for each calendar day of deficiency

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.70 LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC

\$ 4<u>00.00</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.

\$ 8<u>00.00</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.

STANDARD HIGHWAY SPECIFICATIONS SECTION 7.13 LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE

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.

\$ <u>650.00</u> for each calendar day, for each occurrence

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 ______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.

| |
|-------------|
| |

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 | Number of Days of |
|------------------------------|-------------------|
| Completion based on the Base | adjustment |
| Contract Duration | |
| 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

<u>Note</u>: 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 |
|---|---|
| | The minimum limits shall be \$3,000,000 per occurrence and \$6,000,000 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, |
| ■ Commercial General Liability Art. 22.1.1 | 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), |
| | The Consolidated Edison Company of New York, Inc. ("Coned") |
| | 4. National Grid USA ("National Grid") |
| | 5. Verizon New York Inc. ("Verizon") |
| | |
| | |

| | | Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to |
|--|--|--|
| ■ Workers' Compensation ■ Disability Benefits Insurance ■ Employers' Liability □ Jones Act □ U.S. Longshoremen's and Hard Compensation Act | Art. 22.1.2
Art. 22.1.2
Art. 22.1.3
Art. 22.1.3
bor Workers
Art. 22.1.3 | jurisdiction. 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. Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law. Additional Requirements: |
| ☐ Builders' Risk | Art. 22.1.4 | □ Required: 100% of total bid amount □ Required: 100 % of total bid amount for Item(s): 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. Note: Builders Risk Insurance may terminate upon Substantial Completion of the Work in its entirety. |

| ■ Commercial Auto Liability Art. 22.1.5 | \$ 2,000,000 per accident combined single limit 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 Additional Insureds: |
|--|---|
| □Contractors Pollution Liability Art. 22.1.6 | \$_5,000,000 per occurrence \$_5,000,000 aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2 3 |
| ☐ Marine Protection and Indemnity Art. 22.1.7(a) | \$ each occurrence \$ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2 3 |
| ☐ Hull and Machinery Insurance Art. 22.1.7(b) | \$ per occurrence \$ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2 3 |

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| ☐ Marine Pollution Liability | Art. 22.1.7(c) | \$\(\frac{1,000,000}{\)} \text{per occurrence} \\ \frac{1,000,000}{\} \text{aggregate} \\ \text{Additional Insureds:} \\ 1. \text{ City of New York, including its officials and employees, and} \\ 2. \\ \frac{3}{3}. \\ |
|---|---|---|
| [OTHER] | Art. 22.1.8 | |
| ☐ Railroad Protection Liability Policy | | |
| (ISO-RIMA or equivalent form) ap Permittor covering the work to be the designated site and affording damages arising out of bodily inju physical damage to or destruction including damage to the Insured's and conforming to the following: Policy Endorsement CG 28 31 - Exclusion Amendment is require endorsed onto the policy when environmental-related work and exposures exist. Indicate the Name and address Contractor to perform the work, and the name of the railroad prothe work is being performed and Permit. Evidence of Railroad Protective Insurance, must be provided in the Original Policy. A detailed Insura (ACORD or Manuscript Form) was accepted pending issuance of the Policy, which must be provided of the Binder Approval. | performed at protection for ry or death, of property, own property Pollution ed to be for of the the Contract # operty where I the Agency Liability the form of the ance Binder rill be ance Original | \$ 2,000,000 per occurrence \$ 6,000,000 annual aggregate Named Insureds: 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. |

[OTHER] Art. 22.1.8

■ Professional Liability

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.

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.

[OTHER] Art. 22.1.8

■ Engineer's Field Office

Section 6.40, Standard Highway Specifications

Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of \$40,000

[OTHER] Art. 22.1.8

☐ The Following Additional Insurance Must Be Provided:

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.

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) |
| county of) |
| worn to before me this day of, 20 |
| IOTARY 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)

R-PAGES

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
- SB 23-001 SEWER DESIGN STANDARDS
- SB 23-002 PIPE BOLLARD
- SB 23-003 MOBILIZATION
- SB 23-004 SUSTAINABLE CONSTRUCTION

The SB(s) are available online at:

http://www1.nyc.gov/site/ddc/resources/specification-bulletins.page

(NO FURTHER TEXT ON THIS PAGE)

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I - PAGES

NEW SECTIONS

NOTICE

UNLESS OTHERWISE NOTED, ALL SECTIONS, SUBSECTIONS, ARTICLES, OR SUBARTICLES AS REFERRED TO HEREIN WITHIN THESE NEW SECTION SPECIFICATIONS MUST 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)

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SECTION 4.21 RS - RESTORATION SPECIALIST - CONSTRUCTION MONITOR

4.21 RS.1. INTENT:

The Contractor will engage the services of a **RESTORATION SPECIALIST – CONSTRUCTION MONITOR** (RS/CM) who will serve as an adviser to the Engineer. The Engineer, with the RS/CM, will be in consultation with the NYC Department of Parks and Recreation Interagency Coordination (NYC DPR) at Interagency@parks.nyc.gov. The portions of work within this Contract pertaining to the restoration of regulated freshwater wetland resource areas and all other natural areas that require the supervisory expertise of the RS/CM. The RS/CM will supervise all restoration work including, but not limited to, existing plant inventory, special planting species determination, planting restoration, and plant protection, as necessary.

4.21 RS.2. GENERAL DUTIES:

The RS/CM, with the Engineer, will supervise all restoration work performed by the Contractors and Subcontractors for the duration of the contract, in accordance with the plans, specifications and directions of the Engineer and in accordance with the Permit within the limit of the contract. The RS/CM will be responsible for overseeing the implementation of the contract's restoration activities and plant protection in accordance with the Permit.

In addition, the RS/CM will be responsible for adherence to all conditions of the applicable Permits issued by regulatory agencies for the project, during construction and including the monitoring and maintenance period, as they relate to work in regulated freshwater wetland resource areas and all construction restoration and mitigation work. The RS/CM will be responsible for ensuring the Contractor adheres to all conditions of the Permits issued by the New York State Department of Environmental Conservation (DEC), the United States Army Corps of Engineers (USACE) and NYC DPR through construction.

The RS/CM will be responsible for creating planting restoration plans, survey for the existence of dune sandspur (*Cenchrus tribuloides*) plants and create a protection plan, if necessary, to NYC DPR satisfaction. The RS/CM will supervise the natural areas restoration work performed by the Contractor and their Subcontractors (including, but not limited to, overseeing the installation and establishment of plant material and seeding) in accordance with the plans, specifications and directions of the Engineer. The RS/CM will monitor all construction activities associated with the restoration site. The RS/CM will be responsible for overseeing all seeding, installation, monitoring, and maintenance of plant material, as well as the protection of existing vegetation to remain, including trees.

An on-site walk-through with the Engineer, the RS/CM and NYC DPR to review existing conditions is required prior to the start of any restoration work of regulated freshwater wetland resource areas, including all other natural area work or work that will disturb existing natural resource features. The RS/CM will periodically inspect and monitor the establishment progress of the new plantings and determine, with the Engineer, required plant replacements.

4.21 RS.3. QUALIFICATIONS:

The RS/CM selected to perform the required work must have at least five years previous experience in natural area restoration including at least three years of project experience in similar ecological restoration site construction work. The RS/CM must be an Ecologist accredited by the Ecological Society of America, and preferably a Restoration Practitioner certified by the Society for Restoration Ecology. Prior to the start of work, the Contractor will be

required to submit the names and resumes of at least three prospective candidates to DDC Construction and Program Management.

After reviewing the qualifications of the three candidates, DDC with NYC DPR will select the most suitable one candidate or alternatively ask for more choices if they deem the three candidates to be not qualified.

4.21 RS.4. DESCRIPTION:

A. <u>SITE MONITORING OF EROSION CONTROLS AND CONSTRUCTION BEST MANAGEMENT PRACTICES:</u> The RS/CM will monitor the Contractor's in-place erosion and sediment control devices and construction best management practices (BMPs), including, but not limited to, construction (limiting) fences, siltation fences, tree protection, erosion control mat, jute mesh, etc., and must notify the Engineer when maintenance or repair of these devices is necessary. The RS/CM must monitor related/adjacent construction to ensure that these activities do not adversely impact restoration activities or the success of the restoration work. The RS/CM must monitor the Contractor's in-place sediment and erosion control devices at least twice weekly on non-consecutive days AND after any significant rain event (defined as a ¾ inch downpour or 1.5 inches of rain in any 24-hour period). The need for repairs should be communicated to the Engineer and NYC DPR immediately. Documentation of inspections must be provided to the Engineer and NYC DPR on a weekly basis.

SUPERVISION OF ALL SITE RESTORATION WORK: The RS/CM will supervise all aspects of the restoration of natural areas including but not limited to fill and debris removal, soil disturbance, tree protection, seeding, planting, maintenance, and sediment and erosion controls. The RS/CM will be responsible for reporting any concerns or issues that arise during Construction to the Engineer and NYC DPR. Reported concerns or issues must be addressed at the direction of the Engineer with NYC DPR. The Engineer will bring to the attention of NYC DPR any changes to landscape or project construction that are under consideration after construction has started. The Engineer, in consultation with NYC DPR, must approve any of any restoration design changes before they are implemented on parkland.

B. RESTORATION PLANTING PLAN.:

The RS/CM will be responsible for creating a restoration planting design based on existing planting at preconstruction. The RS/CM will be responsible for:

- 1. surveying the existing landscape, within the contract limits, prior to the start of construction to determine existing individual plant locations and plant species.
- 2. creating a draft Existing Plant Plan based on this survey for distribution to NYC DDC Infrastructure Design, the Engineer and NYC Park for review and comments.
- creating a draft Restoration Planting Plan drawing and Planting Details drawings for distribution to NYC DDC Infrastructure Design, the Engineer and NYC Park for review and comments.
- 4. revising and submitting updated plans and details drawings to address review comments until the Engineer, NYC DDC Infrastructure Design and NYC DPR is satisfied and approves as final drawings.

C. DUNE SANDSPUR SURVEY, PLANTING PLAN AND PROTECTION:

The RS/CM will be responsible for determining the potential existence of Dune Sandspur plants within the contract limits and determine protection methods if plants exist. The RS/CM will be responsible for:

- 1. surveying the existing landscape prior at the start of construction to determine potential existence of Dune Sandspur and the plant locations.
- 2. creating a draft Existing Dune Sandspur Plant Protection Plan. Based on this survey, if plant is found to exist within the contract limits, for distribution to NYC DDC Infrastructure Design, the Engineer and NYC Park for review and comments.
- 3. revising and resubmitting updated Existing Dune Sandspur Plant Protection Plan until the Engineer, DDC and NYC DPR is satisfied and approves.
- 4. ensuring, with the Engineer, if Dune Spurgrass is found to exist within the contract limits, that NYC DPR approved protection applications are installed and maintained throughout construction to preserve any existing Dune Sandspur to the Engineer and NYC DPR satisfaction.

D. MONITORING OF PLANTING ESTABLISHMENT:

The RS/CM will be responsible for monitoring the plantings for signs of vegetation die-off and invasive species propagation. At the direction of the Engineer, the RS/CM will conduct monthly plant inspections during the growing seasons (May 30th to September 30th). The RS/CM will determine plants requiring replacement and inform the Engineer. The RS/CM will be responsible for sharing data collected with the Engineer.

E. PHOTO DOCUMENTATION:

The RS/CM will keep a digital photograph log of the restoration site. The photo log will follow the progress of the project, in a clear and understandable progression, and will incorporate before, in-progress and completed photographs of the restoration. Fixed photo points must be used to ensure that before and after photographs are taken from the same location and angle. The photo log will be utilized by NYC DPR for monitoring and any other purposes.

The RS/CM will use a digital camera for photo-documentation and monitoring purposes during all phases of the project. Photos must be clear and legible. The RS/CM will then provide pictures to the Engineer after the restoration is completed and pictures are to be provided in each monitoring report thereafter. The RS/CM will assemble the completed photo log for distribution to the Engineer who will distribute to NYC DPR.

F. MONITORING REPORTS

The RS/CM will prepare and submit a Monitoring Report to the Engineer, who will distribute to NYC DPR, following the completion of all restoration activities at the restoration site. The RS/CM must continue to submit Monitoring Reports as required by the conditions of the Permit - until the restoration site has achieved the plant survivorship required by NYC DPR. A digital copy of each report submittal will be required. The RS/CM will be responsible for responding to any questions or comments after the submittal of the monitoring reports.

The RS/CM will examine, monitor and report on the various components of the restoration and must incorporate color photographs, color photocopies, graphs, etc., as appropriate. All information will be reported in a concise format. The Monitoring Report will:

- a. report on all construction activities related to the construction of the natural area restoration site.
- b. report the conditions of the vegetation seeded and planted under the Permit,
- c. quantify survival and cover rates and compare to Permit requirements,
- d. recommend replacement species,
- e. report observed impacts to existing vegetation,
- f. report success rates in controlling erosion and sedimentation,
- g. report voluntary plant recruitment,
- h. present recommendations, and
- i. comply with all Permit requirements for all work.

The monitoring reports must comply the Permit.

G. POST-CONSTRUCTION MONITORING:

The restoration site will be walked by the Engineer, the RS/CM, the Contractor, and NYC DPR approximately one month following completion of construction to assess compliance with the Permit. A determination will be made as to whether the any additional work is required to achieve compliance with the Permit. The Contractor will be required to achieve compliance with all permits and approvals.

H. PERMIT COMPLIANCE:

The RS/CM will act as the Construction Monitor as per the requirements of the Permit. The RS/CM must ensure all construction activities adhere to the requirements of the Permit, as well as all other Permits and approvals. The RS/CM will address any deviation after the construction of the mitigation and address all issues as directed by the Engineer with NYC DPR.

4.21RS.5. MEASUREMENT AND PAYMENT:

The quantity to be measured for payment under this section RESTORATION SPECIALIST – CONSTRUCTION MONITOR will be the time, measured in PERSON HOURS, necessary for the determination of Dune Spurgrass existence and any necessary protection, creation of existing and new restoration planting plans, supervising monitoring and reporting of restoration work within this Contract in accordance with the plans, specifications and direction of the Engineer with NYC DPR.

Payment for RESTORATION SPECIALIST – CONTSTRUCTION MONITOR will be a unit price per PERSON HOUR and will cover the cost of all labor, materials, reports, plant, equipment, inspection, insurance, and incidentals required to complete the work, all in accordance with the Contract Drawings, the specifications and the directions of the Engineer with NYC DPR.

Payment will be made under:

Item No. Item Pay Unit

4.21 RS RESTORATION SPECIALIST – CONSTRUCTION MONITOR PERSON-HOUR (P/Hr)

The Section 6.40 below supersedes and replaces Section 6.40 of NYC DOT

Standard Specifications dated May 16, 2022

SECTION 6.40 - Engineer's Field Office

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) <u>Lighting</u> Electric light, non-glare type luminaries to provide a minimum illumination level of 100 ft.- candles at desk height level.
 - (b) <u>Heating and Cooling</u> Adequate equipment to maintain an ambient air temperature of 70° F +5°
 - (c) Electrical Energy Outlets
 - (d) <u>Toilet</u> 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) <u>Potable Water</u> 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) <u>Signs</u> 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) <u>Microwave, Toaster Oven, and Coffee Maker</u> Basic reheating equipment or approved appliances for use by City personnel.
- (i) <u>Windows and Doors</u> 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) <u>Partitions</u> Partitions for workspace enclosures shall be either permanent walls or of the modular type similar to Herman Miller's standard fabric covered line.
- (k) <u>Kitchen Sink</u> Mechanism to provide non-drinking, hot and cold, running water.
- (I) 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) <u>Telephone Answering Machine</u> 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 message 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) <u>Computer Equipment</u> - 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
- 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
(<i>Minimum</i>) | Upload Speeds
(<i>Minimum</i>) |
|--------------------|---------------------------------------|-------------------------------------|
| 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. hwk666@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.
- (a) <u>Data Access</u> 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) <u>Field Testing Equipment</u>.

- (a) <u>Air Entrainment Meters</u> 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) <u>Slump Test Sets</u> 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) <u>Gas Meters</u> For use in detecting the presence of explosive gases and vapors for use by City personnel.
- (f) <u>Straight Edge</u> 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.
- (i) One Million Candlepower Rechargable 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 | | | | | | |
|---|-------------------|-----|-------|-----------------|-------|-------|-----------------|
| | Α | В | С | 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 ° | 4 | 4 | 6° |
| 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 |
| Waste paper 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 |

| SPECIFIC REQUIREMENTS | FIELD OFFICE TYPE | | | IVVOID | | | |
|--|-------------------|---|---|----------------|---|----|----------------|
| | Α | В | С | CU | D | DC | DU |
| Drafting tables (3'-0" x 5'-0") with storage drawers and stool. | 1 | 2 | 2 | 3 ^d | 4 | 4 | 5 ^d |
| 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 foot (20'x16' minimum, equipped with (2) 3'x6.5' tables and (30) chairs. | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

- Provide four (4) each of Office Desks, Swivel Chairs and Waste Paper Baskets in private utilities room.
- b Provide eight (8) Folding Chairs in private utilities room.
- Provide two (2) Fire Resistant 4- Drawer Legal Size Cabinets in private utilities room.
- Provide one (1) each of Fire Extinguisher, Drafting Table and Vertical File Rack in private utilities room.
- 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. <u>Project substantial completion is achieved in 26 months</u>: 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 |

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 insures 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 remove 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 work day, 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 x 1.5 ft = 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:

- 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. <u>Violations</u>. 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 shut downs, 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. <u>Project substantial completion is achieved in 28.5 months:</u> 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. <u>Project substantial completion is achieved in 26 months</u>: 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 <u>not</u> be considered as a movement to a new location and will <u>not</u> 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.ItemPay Unit7.35PEDESTRIAN CHANNELIZERL.F.

SECTION 7.55 - New Pipe Railings

1. Work to Include. Under this section, the Contractor will furnish and install a triple (top, intermediate & bottom) pipe railing with posts in accordance with the plans, the specifications, and the directions of the Engineer.

2. <u>Materials.</u> All rails and posts will be galvanized steel pipe of the sizes shown on the plans and will conform to ASTM Designation A53, except that pipe need not undergo hydrostatic test.

Angles and bars will conform to ASTM Designation A36.

Bolts, nuts, and washers will conform to ASTM Designation A307.

Galvanizing of bolts, nuts, and washers will conform to ASTM Designation Al 53.

All components of paint will be compatible and supplied by a single manufacturer. All paints will be applied in compliance with the paint manufacture's data sheets. Prior to field painting, the surfaces to be painted will be clean, dry, and lightly sand papered.

Approved paint types and their manufacturers will be as listed in the NYS Department of Transportation's, Materials and Equipment Approved List for "A. STRUCTURAL STEEL PAINTS CLASS 1 (708-01)".

3. Methods. All welds will comply with the current requirements of the American Welding Society.

The Contractor will furnish and install a new triple pipe railing and posts for embedment or bolting to the concrete steps as shown on the plans or directed by the Engineer.

All surfaces of the railing and posts will be thoroughly cleaned of all rust, oil, grease, scale, and foreign matter. All surfaces of galvanized steel pipe and posts to be exposed after installation will be painted.

Prior to painting, galvanized surfaces will be treated. The first phase of treatment will be solvent cleaning performed in accordance with the requirements of SSPC-SPI, No. 1, Solvent Cleaning. The second phase of treatment will be pretreatment with a "wash-coat" of a type conforming to the requirements of Military specification MIL-P-15328b or c or an approved equal. The pretreatment may be applied by any method, as approved by the Engineer. After application and drying of the pretreatment, paint will be applied.

Surfaces to be exposed after installation will be given one (1) shop coat of Epoxy primer, one (1) shop coat (field coat permitted) of Epoxy Intermediate Coat, and one (1) final field coat of Polyurethane Topcoat. The color of the topcoat will match the existing railing, as approved by the Engineer. Prior to field painting, the surfaces to be painted will be clean, dry, and lightly sand papered.

All field painting will be done in dry weather or under cover. All surfaces will be free from moisture or frost when paint is applied, and painted surfaces will not be permitted to become wet by condensation or otherwise be subjected to freezing temperatures until the paint has reached a hard set. No painting will be started when the temperature of the metal or the surrounding air is less than 5 degrees F . above the dew point. Any paint injuriously affected by cold, rain, moisture, or condensation will be entirely cleaned off and fresh paint applied.

All paint will be stirred to agitate and emulsify the contents thoroughly. The paint will be kept stirred and at a uniform consistency until applied. There will be no thinning or modification of the paint except upon and in accordance with the specific approval of the Engineer.

The paint will be applied either wholly by brush or, if approved by the Engineer, in part by brush and in part by approved airless spray in such a way as to secure an even paint film uniform in thickness, tint and consistency over the entire surface, free from pin holes, holidays, or excessive brush marks. The paint should be thoroughly dry before the application of successive coats.

Care will be used to prevent paint dripping, spattering's or spraying of finished surfaces, and any such dripping, spattering's or spraying will be cleaned off before the paint has dried.

- 4. <u>Measurement.</u> The quantity of new steel pipe railing and posts to be measured for payment will be the number of linear feet of railing, measured along the center line of the top rail, actually installed to the satisfaction of the Engineer.
- 5. <u>Price to Cover</u>. The contract price bid per linear foot for New Pipe Railings will cover the cost of furnishing all labor, materials, plant, equipment, insurance, and incidentals necessary to furnish, install, and paint new pipe railing and posts complete, including, but not limited to, all pipe, drilling of holes, cement grout, bolts, nuts, washers, angles, bars, paint and shop drawings in accordance with the plans, the specifications, and the directions of the Engineer.

Payment will be made under:

. . ..

| Item No. | Item | Pay Unit |
|----------|-------------------|----------|
| 7 55 | NEW PIPE RAILINGS | l F |

SECTION 7.70 TPR - TEMPORARY PEDESTRIAN RAMP (NOT A PAY ITEM)

7.70TPR.1. INTENT. This section describes the work of providing Temporary Pedestrian Ramps (TPRs) near new pedestrian construction work areas and the ADA guidelines. TPRs must provide access to sidewalk routes when pedestrian ramps are not accessible due to construction activities going on or around pedestrian ramps.

The work will consist of furnishing, installation, maintaining, relocating, and removing TPRs in order to access sidewalk areas as shown on the Contract Drawings or where otherwise directed by the Engineer.

TPRs must consist of temporary pedestrian ramp units having a geometry similar to that shown on the Contract Drawings, as directed the Engineer and complying with the following requirements:

- 1. TPR running slope must not exceed 1:12 ramp slope, which equals 4.8 degrees slope or one foot of wheelchair ramp for each inch of rise. For instance, a 30 inch rise requires a 30 foot handicap wheelchair ramp.
- 2. Cross slope must not exceed 1:48.
- 3. Handrails must be provided on both sides if rise is more than 6 inches.
- 4. A minimum 5' x 5' flat, unobstructed area at the top and bottom of the ramp
- 5. A Minimum width of 36 inches of clear space across the wheelchair ramp.
- 6. Maximum run of 30 feet will be allowed ramp before a rest or turn platform.
- 7. Ramp handrail height will be between 34" and 38" in height on both sides of the wheelchair ramps.
- 8. The TPR must allow for normal street drainage.

7.70TPR.2. MATERIALS AND METHODS.

- 1. LUMBER TPR: Lumber must have a slip-resistant surface. Use pressure treated wood for most of the wood material. Lumber must be preservative-treated southern pine, grade #2 or better. Pressure treated lumber must resists rot and decay with level of treatment as per American Wood Council latest standards. Decking board for the TPR will be at a minimum 2" thick.
- 2. ALUMINUM TPR: Aluminum must be high traction (e.g., textured extruded aluminum surface), dock plate with a coefficient of friction not less than 0.5 and made from high strength, lightweight aluminum; it must be slip-resistant and have a self-adjusting ground transition plate. The Ramp, Step, and Platform system is designed to be a rigid, free-standing structure. All footplates must be fastened securely to a concrete surface or 12" minimum diameter footings in order to achieve full structural integrity. Footing depth will depend on local building code. Fastening all platforms to the building or modular building with lag screws is highly recommended.
- 3. FIBERGLASS/PLASTIC TPR: Fiberglass/ Plastic ramps must be able to take minimum wheelchairs, foot traffic etc., not less than 550 lbs., should be ADA compliant and adapts to varying curb heights from minimum of 2.5" to 7". Must be anti-slip with high visibility surface and must be bolted for maximum stability and security. Coefficient of friction will not be less than 0.5.

All ramp handrails and ramp guardrails are designed to withstand a concentrated load of 200 pounds applied in any direction on the top of the rail.

All ramp handrails are designed to be continuous along ramp runs and in between the inside corner of 90 degree and 180 degree turns in ramp direction. Handrails are not interrupted by posts or other obstructions.

Platforms and landings will be designed to carry a uniform live load of 100 pounds per square foot and a concentrated vertical load of 300 pounds in an area of one square foot.

Walking surfaces for serial number 1, 2 and 3 above must be designed to have a coefficient of friction no less than 0.50 in all directions of travel.

7.70TPR.3. METHODS. All units must be in good condition and acceptable to the Engineer. The Contractor must install the TPR by placing them where shown on the Contract Drawings, specifications and as directed by the Engineer. All the modular ramps will be assembled as per manufacturer's instructions.

If the modular ramps are pre-assembled and transported to their locations, Contractor must use utmost care in the delivery and installation of these units.

Units can also be fabricated/constructed at site with the approval of the Engineer.

Contractor must continuously maintain the TPR, where shown on the Contract Drawings or directed by the Engineer, until ordered by the Engineer to remove the completion of a work stage.

Should a unit or units of barricades become damaged or otherwise unacceptable to the Engineer, the Contractor must replace said units within twenty-four (24) hours of notice by the Engineer, at no additional cost to the City.

7.70TPR.4. MEASUREMENT AND PAYMENT

The price of Temporary Pedestrian Ramp (TPR) will be deemed included in the prices bid for all the scheduled contract items.

The Section below supersedes and replaces Sections 8.01, 8.01 C1, 8.01 C2, 8.01H, 8.01S,

8.01W1, & 8.01 W2 of NYC DOT Standard Specifications dated May 16, 2022

SECTION 8.01 Handling, Transporting, and Disposal of Potential and Identified Contaminated and Hazardous Materials

- **8.01.1. DESCRIPTION.** This Section provides common references and requirements for **Sections 8.01 C1**, **8.01 C2**, **8.01H**, **8.01S**, **8.01W1**, and **8.01 W2**.
- **8.01.2. MATERIALS.** None.
- 8.01.3. METHODS.
- (A) NYCDEP Limitations for Discharge to Sewer

NYCDEP Bureau of Wastewater Treatment-Limitations for Effluent to Sanitary or Combined Sewers

| Parameter ¹ | Daily
Limit | Units | Sample Type | Monthly
Limit |
|------------------------------------|----------------|----------|---------------|------------------|
| Non-polar material ² | 50 | mg/l | Instantaneous | |
| рН | 5-11 | SU's | Instantaneous | |
| Temperature | < 150 | Degree F | Instantaneous | |
| Flash Point | > 140 | Degree F | Instantaneous | |
| Cadmium | 2 | mg/l | Instantaneous | |
| Gaamam | 0.69 | mg/l | Composite | |
| Chromium (VI) | 5 | mg/l | Instantaneous | |
| Copper | 5 | mg/l | Instantaneous | |
| Lead | 2 | mg/l | Instantaneous | |
| Mercury | 0.05 | mg/l | Instantaneous | |
| Nickel | 3 | mg/l | Instantaneous | |
| Zinc | 5 | mg/l | Instantaneous | |
| Benzene | 134 | ppb | Instantaneous | 57 |
| Carbontetrachloride | | | Composite | |
| Chloroform | | | Composite | |
| 1,4 Dichlorobenzene | | | Composite | |
| Ethylbenzene | 380 | ppb | Instantaneous | 142 |
| MTBE (Methyl-Tert-Butyl-
Ether) | 50 | ppb | Instantaneous | |
| Naphthalene | 47 | ppb | Composite | 19 |
| Phenol | | | Composite | |
| Tetrachloroethylene (Perc) | 20 | ppb | Instantaneous | |

| Parameter ¹ | Daily
Limit | Units | Sample Type | Monthly
Limit |
|------------------------------|----------------|-------|---------------|------------------|
| Toluene | 74 | ppb | Instantaneous | 28 |
| 1,2,4 Trichlorobenzene | | | Composite | |
| 1,1,1 Trichloroethane | | | Composite | |
| Xylenes (Total) | 74 | ppb | Instantaneous | 28 |
| PCB's (Total) ³ | 1 | ppb | Composite | |
| Total Suspended Solids (TSS) | 3504 | mg/l | Instantaneous | |
| CBOD⁵ | | | Composite | |
| Chloride ⁵ | | | Instantaneous | |
| Total Nitrogen ⁵ | | | Composite | |
| Total Solids ⁵ | | | Instantaneous | |

Notes for table above:

- 1. All handling and preservation of collected samples and laboratory analyses of samples must be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses must be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC's Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988.
- 2. Analysis for *non-polar materials* must be done by USEPA method 1664 Rev. A. Non-Polar Material will mean that portion of the oil and grease that is not eliminated from a solution containing N–Hexane, or any other extraction solvent the USEPA will prescribe, by silica gel absorption.
- 3. Analysis for PCBs is required if **both** conditions listed below are met:
 - a. if proposed discharge ≥ 10,000 gpd;
 - b. if duration of a discharge > 10 Days.

Analysis for PCBs must be done by USEPA method 608 with MDL=<65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).

- 4. For discharge ≥ 10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000 gpd, the limit is determined on a case-by-case basis.
- 5. Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge ≥ 10,000 gpd.

(B) Applicable Regulations

Applicable regulations include, but are not limited to:

- 1. 49 CFR 100 to 179 DOT Hazardous Materials Transport and Manifest System Requirements
- 2. 6 NYCRR 375-6 NYSDEC Remedial Program Soil Cleanup Objectives
- 6 NYCRR 360-1 NYSDEC Solid Waste Management Facilities
- 4. 6 NYCRR 364- Waste Transporter permits
- 5. Local restrictions on transportation of waste/debris
- 6. 40 CFR 260 to 272 Hazardous Waste Management (RCRA)
- 7. 6 NYCRR 371 Identification and Listing of Hazardous Wastes
- 8. 6 NYCRR 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
- 9. 6 NYCRR 373-1 Hazardous Waste Treatment, Storage and Disposal Facility Permitting Requirements
- 10. 6 NYCRR 376 Land Disposal Restrictions
- 11. Posted weight limitations on roads or bridges
- Transportation Skills Programs, Inc. 1985 Hazardous Materials and Waste Shipping Papers and Manifests
- 13. Other local restrictions on transportation of waste/debris
- 14. Occupational Safety and Health Administration (OSHA), Standards and Regulations, 29 CFR 1910 (General Industry)
- 15. OSHA 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response
- 16. OSHA Safety and Health Standards 29 CFR 1926 (Construction Industry)
- 17. OSHA 29 CFR 1910.146 Confined Space Entry Standard
- 18. Standard Operating Safety Guidelines, USEPA Office of Emergency and Remedial Response Publication, 9285.1-03
- NIOSH / OSHA / USCG / USEPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1986)
- 20. U.S. Department of Health and Human Services (DHHS) "NIOSH Sampling and Analytical Methods," DHHS (NIOSH) Publication 84-100
- 21. ANSI, Practice for Respiratory Protection, Z88.2 (1980)
- 22. ANSI, Emergency Eyewash and Shower Equipment, Z41.1 (1983)
- 23. ANSI, Protective Footwear, Z358.1 (1981)
- 24. ANSI, Physical Qualifications for Respirator Use, Z88.6 (1984)
- 25. ANSI, Practice for Occupational and Educational Eye and Face Protection, Z87.1 (1968)

- 26. Water Pollution Control Federation "Manual of Practice No. 1, Safety in Wastewater Works"
- 27. NFPA No. 327 "Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers"
- 28. Occupational Safety and Health Act Confined Space Entry Standard 29 CFR 1910.146.87
- 29. Department of Transportation 49 CFR 100 through 179
- 30. Department of Transportation 49 CFR 387 (46 FR 30974, 47073)
- 31. Environmental Protection Agency 40 CFR 136 (41 FR 52779)
- 32. Environmental Protection Agency 40 CFR 262 and 761
- 33. Resource Conservation and Recovery Act (RCRA)
- 34. Any transporter of hazardous or non-hazardous materials must be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

(C) Definitions

<u>Contaminated Groundwater and Decontamination Fluids</u>: Groundwater within the excavation trench or decontamination water that contains regulated compounds above the NYCDEP Discharge to Sewer Effluent limits.

<u>Disposal or Treatment Facility:</u> A facility licensed to accept either non-hazardous regulated waste or hazardous waste for either treatment or disposal.

<u>Exclusion Zone</u>: Work area that will be limited to access by Contractor personnel specifically trained to enter the work area only. The exclusion zone will be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area.

<u>Hazard Assessment</u>: An assessment of any physical hazards that may be encountered on a work site.

<u>Hazardous Soils:</u> Soils that exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.

<u>Hazardous Substance Evaluation:</u> An evaluation of the possible or known presence of any hazardous substances that may be encountered on a job site. This evaluation is included in the Health and Safety Plan and will include the identification and description of any hazardous substances expected to be encountered. Material Safety Data Sheets (MSDS) will be included for each substance.

<u>Health and Safety Plan</u>: A plan employed at a work site that describes all the measures that will be taken to assure that all work is conducted in a safe manner, and that the health of the workers and the public will be insured.

<u>Material Handling Plan</u>: A plan outlining the methods that will be employed to handle, transport and dispose of contaminated materials.

Non-Hazardous Contaminated Soils: Soils which exhibit a distinct chemical or petroleum odor or exhibit elevated photoionization detector readings but are not classified as hazardous waste under 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.

New York State Health Department's Environmental Laboratory Approval Program: A program by which the state of New York approves and accredits environmental testing laboratories.

<u>PCBs:</u> Polychlorinated biphenyls are a group of toxic compounds commonly used as a coolant in transformers and other electrical components.

<u>Photoionization Detector</u>: A handheld instrument used to measure volatile organic compounds in air. The instrument ionizes the organic molecules through the use of an ultraviolet lamp.

<u>RCRA Hazardous Waste Characteristics</u>: Characteristics of a material which may indicate the material is hazardous. These include ignitability corrosivity, reactivity, and toxicity.

<u>Total Petroleum Hydrocarbons</u>: An analytical procedure used to determine the total amount of petroleum compounds in a material.

(D) Phase I and Phase II Investigation Reports

If Phase I and / or Phase II investigation reports have been prepared for the Project, they will be included in the HAZ-Pages in Volume 3 of the Contract.

If there are no Phase I and / or Phase II investigation reports in the HAZ-Pages in Volume 3 of the Contract, but 8.01 bid items are included in the Bid Schedule, the Contractor is to assume the excavated soil is contaminated and bid on the quantities listed. The Contractor must use the Contractor's engineering judgement for pricing those items.

8.01.4. MEASUREMENT AND PAYMENT. NO SEPARATE PAYMENT WILL BE MADE FOR COMPLYING WITH THE REQUIREMENTS OF THIS SECTION.

ITEM 8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL

8.01 C1.1 WORK TO INCLUDE

A. General

This work will consist of the handling, transportation, and disposal of non-hazardous contaminated soils. The materials covered by this specification are soils that are contaminated with petroleum or other chemicals (including but not limited to metals, pesticides, polychlorinated biphenyls [PCBs], volatile organic compounds [VOCs], semi-volatile organic compounds [SVOCs], etc.) but cannot be classified as hazardous waste. For the purpose of this specification, soil will be defined as any material excavated below the pavement (concrete and/or asphalt) and pavement base (concrete and/or asphalt). Soil will also be defined as any material excavated from wetlands and/or wetlands adjacent area, or any areas that are not covered with hard pavement (e.g., concrete, asphalt), such as grass or dirt areas.

Soil to be excavated can be classified as non-contaminated, non-hazardous contaminated, or hazardous soil. Non-contaminated soils are defined as soils not exhibiting any of the following characteristics:

- Exceedances of New York State Department of Environmental Conservation (NYSDEC)
 Part 375-6 Restricted Commercial Soil Cleanup Objectives (SCOs) for street work, with the
 exception of benzo(a)pyrene which will have a limit of 3 parts per million (ppm), Restricted
 Residential SCOs for work areas in parkland, Residential SCOs for work in housing project
 areas, and Protection of Ecological Resources SCOs for work in wetlands and/or wetlands
 adjacent area.
- Elevated Photo-Ionization Detector (PID) readings (readings of greater than 10 parts per million [ppm] on a calibrated PID), which is subsequently confirmed by laboratory analysis specified under 8.01 C2.1.B.3
- Visual evidence of contamination, such as the presence of staining, discoloration, which is subsequently confirmed by laboratory analysis and exhibits exceedances of applicable SCOs.
- Petroleum and/or chemical odors, which are subsequently confirmed by laboratory analysis and exhibits exceedances of applicable SCOs.
- Physical evidence of coal ash, municipal solid waste, dredged spoils, or greater than 50% of the material is construction and demolition debris.

Non-hazardous contaminated soils are defined as soils exhibiting one or more of the above characteristics. Non-hazardous contaminated soils must be handled, transported, and disposed of in accordance with the specifications for Item 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil.

Hazardous soils are defined as soils showing exceedances of Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels for Hazardous Waste published in Resource Conservation and Recovery Act (RCRA), 6 New York Codes, Rules, and Regulations (NYCRR) Part 371, or 40 Code of Federal Regulations (CFR) Section 261. Hazardous soils must be handled, transported, and disposed of in accordance with the specifications of this section.

This entire specification 8.01 covers the handling, transportation, and disposal of non-hazardous contaminated soils and hazardous soils only. Non-contaminated soil can be reused at the Project site, provided it meets other Contract requirements. Non-hazardous contaminated soils and hazardous soils cannot be reused. Excess non-contaminated soil becomes the property and responsibility of the Contractor.

The Contractor must ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of non-hazardous contaminated soils are in compliance with all applicable Federal, State, and City statutes and regulations.

The Contractor must supply all equipment, material and labor required to conduct the specified work of this Item. The Contractor must document the excavation, handling, transportation and disposal of non-hazardous contaminated soils with analytical reports, manifests, photos, and clean fill documentation.

B. Request for Approval of Subcontractors

In accordance with Article 17 of the Contract, a subcontractor/subconsultant, such as the Environmental Consultant and the waste hauler, is not permitted to start work until approved by the Engineer. If the Contractor performs work using a subcontractor/subconsultant prior to approval, the Contractor will not be paid for the work performed by that subcontractor/subconsultant and the Contractor may be subject to penalties including, but not limited to, initiation of default proceedings.

The Contractor must submit a completed original Request for Approval of Subcontractors (RFAS) form and all required documents, such as legal identity, project reference list, Corporate Health and Safety Plan (HASP), waste transporter permits, Occupational Safety and Health Administration (OSHA) 10 certification, Hazardous Waste and Emergency Response (HAZWOPER) certification, etc., to the Engineer at least 30 days prior to the scheduled subcontract work start date. The Engineer must then submit the original RFAS to DDC Safety and Site Support, Office of Environmental and Hazmat Services (OEHS) for review and approval. If the RFAS is denied by OEHS, OEHS will issue the final denial and return the original RFAS to the Engineer. If the RFAS is approved by OEHS, OEHS will forward the original RFAS package and an approval memo to the DDC Agency Chief Contracting Officer (ACCO) for further review and approval. The ACCO's Vendor Integrity Unit and Office of Contract Opportunity (OCO) will review the subcontractor/subconsultant's overall business integrity and compliance with the vendor integrity requirements in the PASSPort system, Executive Order 50, Local Law 1, and Minority- and Women-Owned Business Enterprise/ Disadvantaged Business Enterprise (MWBE/DBE) participation as per the Contract. ACCO will issue the final Approval or Denial. The original RFAS will be returned to the Engineer, who will subsequently notify and return the original RFAS to the Contractor.

C. Environmental Consultant

The Contractor must retain an independent Environmental Consultant to obtain all permits, prepare the plans required in the specification 8.01 and as per DDC issued templates, and perform all field screening, sampling, air monitoring, and other health and safety services. The Contractor is not permitted to self-perform this work. The Environmental Consultant must be approved under the RFAS process and must demonstrate the minimum requirements as set forth below:

- 1. The Environmental Consultant project supervisor on site and other designated key personnel must have a minimum of three (3) years of experience in the environmental field dealing with issues associated with contaminated/hazardous soils. Such experience must include oversight of environmental investigations, specifically including VOC and dust monitoring services as a routine part of daily operations.
- 2. The Environmental Consultant must be experienced in work of similar nature, size, and complexity and must have previous experience in working with DDC.
- 3. The Environmental Consultant must furnish a list of at least five (5) projects completed within the last 3 years, identifying the location, nature of services provided, owner, owner's contact, contact's working telephone number, project duration and value of the projects.

D. Sampling and Analysis

Pior to the performance of soil sampling, the Contractor will submit a Field Sampling Plan (FSP). Soil sampling must not be conducted until OEHS has approved the FSP. The Contractor must conduct sampling and analysis of the impacted soils as specified under Item 8.01 C2 – Sampling and Testing of Non-Hazardous Contaminated/Potentially Hazardous Soil for Disposal Purposes. The laboratory results must be forwarded to OEHS for review to determine if the soils would be handled and disposed of as non-hazardous contaminated soils or hazardous soils.

E. Material Handling Plan

At least 45 days prior to the commencement of work, the Contractor must submit to the OEHS for review a Material Handling Plan (MHP). The MHP must be approved by the OEHS prior to the Contractor beginning any soil excavation work. The MHP must, at a minimum, consist of:

- 1. The Contractor's procedures for identifying non-hazardous contaminated soils during excavation, including the specific model and manufacturer of intended organic vapor monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
- 2. The Contractor's procedures for safely handling non-hazardous contaminated soils. The procedures must include personnel safety and health as well as environmental protection considerations.
- 3. For the proposed laboratory for analysis of representative soil samples, provide the following: (a) name, (b) address, (c) telephone number, and (d) New York State Department of Health's (NYSDOH) Environmental Laboratories Accreditation Program (ELAP) status.
- 4. Identification of the Contractor's proposed waste transporter(s) (hauler). This information must include:
 - a) Name and Waste Transporter Permit Number;
 - b) Address;
 - c) Name of responsible contact for the waste transporter;
 - d) Telephone number for the contact;
 - e) All necessary permit authorizations for each type of waste transported; and,
 - f) Previous experience in performing the type of work specified herein.
- 5. The name and location of the facility where an off-site scale is located. The Contractor must outline the procedures for controlling trucks leaving the work site and enroute to the off-site scale.
- 6. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
- 7. A backup facility must be provided, should the staging/stockpile areas become unavailable, insufficient in area, or presented by some other unforeseen difficulty.
- 8. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for contaminated soils (primary and back-up) for final disposal of the soils. Both primary and backup TSD facilities must be currently state-licensed disposal facilities approved to receive contaminated soil. The information required for each facility must include:
 - a. General Information

- i. Facility name and the State identification number;
- ii. Facility location;
- iii. Name of responsible contact for the facility;
- iv. Telephone number for contact;
- v. Signed letter of agreement to accept waste as specified in this Specification. The letter must indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary; and,
- vi. Unit of measure utilized at disposal facility for costing purposes.
- b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.
- c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.
- d. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.
- e. The Contractor must provide the date of the proposed facility's last compliance inspection.
- f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility must be provided. The source and nature of the cause of violation must be stated, if known.
- 9. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 C1.2 MATERIALS

- A. The Contractor must provide containers as specified in the United States Department of Transportation (USDOT) regulations.
- B. The Contractor must provide polyethylene sheeting, which is to be placed under (20mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.
- C. The Contractor must assure that the waste transporter's appropriate choice of vehicles and operating practices are fitted to prevent spillage or leakage of non-hazardous contaminated material during transportation.
- D. The Contractor must provide, install, and maintain any temporary stockpiling or loading facilities on site as required until completion of material handling activities. The location and design of any such facilities must be included in the MHP.

8.01 C1.3 CONSTRUCTION DETAILS

A. Material Handling

- 1. Immediately after excavation of non-hazardous contaminated soil, the Contractor must:
 - a. Load material directly onto trucks/tankers/roll offs for disposal off site; or,
 - b. If interim stockpiling is required, place non-hazardous contaminated soil on a minimum of 20 mil. polyethylene sheeting and cover it securely by minimum of 10 mil. polyethylene sheeting to protect against cross contamination, airborne dust, leaching or runoff of contaminants into the subsurface, groundwater, or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the DDC to prevent tearing or removal by wind or weather. Grade surrounding surface to provide for positive drainage

away from pile. Each stockpile must not exceed 500 cubic yards. Non-hazardous contaminated soils must be stockpiled separately from non-contaminated and hazardous soil at an off-site location approved by DDC or secured on-site by the Contractor, meeting all required Federal, State and Local stipulations. Stockpiles must be at least 800 feet away from any sensitive receptors, such as schools, daycare center, hospitals, nursing homes, etc., and at least 100 feet away from any water body.

- 2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the public from non-hazardous contaminated materials as described in the approved MHP, Environmental Health & Safety Plan (EHASP), and Item 8.01 S Health and Safety.
- Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally identified must be segregated in stockpiles and the Environmental Consultant promptly notified to collect soil samples for analysis. Construct stockpiles to the same requirements as stated in subsection (A)(1)(b) above.
- 4. Provide any dewatering that is necessary to complete the work. Contaminated water must be disposed of in accordance with Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.
- 5. Provide and operate field organic vapor test equipment, a PID or a flame ionization detector (FID), to detect general organic vapor levels at intervals of approximately 50 cubic yards of soil excavated, when visual or odor observations indicate the material may substantially differ from the soil previously excavated, and/or as directed by the Environmental Consultant.

B. Off-Site Transportation to Disposal Facility

General

- a. The Contractor must furnish all labor, equipment, supplies and incidental costs required to transport non-hazardous contaminated material from the work area to the off-site disposal facility, and any other items and services required for transporting nonhazardous contaminated material for disposal at an off-site facility.
- b. The Contractor will be responsible for tracking all materials and vehicles from the site to the off-site scale at the final TSD facility.
- c. The Contractor must submit to the Engineer the certified tare and gross weight slips for each load received at the accepted facility which must be attached to each returned manifest. These documents must be maintained and kept with project field records.
- d. Non-hazardous contaminated soils must be delivered to the disposal or treatment facility within 30 calendar days after excavation.
- e. The Contractor must coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.
- f. The Contractor must inspect all vehicles leaving the project site to ensure that nonhazardous contaminated soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.
- g. The Contractor must obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments when directed by the Engineer in consultation with OEHS.
- h. The Contractor must provide waste profile forms to OEHS for review and approval before transporting non-hazardous contaminated soil to the approved TSD facility.

2. Hauling

a. The Contractor must coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities must be measured and recorded upon arrival at the

- disposal facility. If any deviation between the two (2) records occurs, the matter is to be reported immediately to the Engineer and to be resolved by the Contractor to the satisfaction of the Engineer.
- b. The Contractor will be held responsible, at its own cost, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
- c. The Contractor must ensure that trucks are protected against contamination by properly covering and lining them with polyethylene sheeting or by decontaminating them prior to and between acceptance of loads. Trucks with loaded non-hazardous contaminated soil must be covered securely with tarps before leaving the project site to prevent generation of airborne dust during hauling.
- d. The Contractor will be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
- e. The Contractor must only use the transporter(s) identified in the approved MHP for the performance of work. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitute or additional transporters.
- f. The Contractor must develop, document, and implement a policy for accident prevention.
- g. The Contractor must not combine non-hazardous contaminated materials from other projects with material from this project.
- h. No material will be transported until approval by the Engineer is obtained.

3. Off-Site Disposal

- a. The Contractor must use only the disposal facility(ies) identified in the approved MHP for the performance of the work. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitutions or additions of disposal facilities.
- b. The Contractor must be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and for ensuring that the facility provides the stated treatment and/or disposal services.
- c. The City reserves the right to contact and visit the TSD facility, and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.
- d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the Engineer in the same manner and with the same requirements as for the original facility(ies). This must be done at no extra cost or delay to the City.
- e. The Contractor must obtain manifest forms and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest must be submitted to the Engineer within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. The signed manifests must be maintained and kept with the project field records. Any manifest discrepancies must be reported immediately to the Engineer and be resolved by the Contractor to the satisfaction of the Engineer.

4. Equipment and Vehicle Decontamination

- a. The Contractor must design and construct a portable decontamination station to be used to decontaminate equipment and vehicles that have been used to handle contaminated soil. The cost for this work will be paid under Item 8.01 S Health and Safety.
- Water generated during the decontamination process must be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

8.01 C1.4 METHOD OF MEASUREMENT

- A. Quantities for contaminated soils will be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 C1(3)(B)(1), that are capable of generating load tickets.
- B. Final disposal of hazardous soil will be paid for under Item 8.01 H Handling, Transporting and Disposal of Hazardous Soil.
- C. Disposal of contaminated water will be paid for under Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water. Backfill will be paid for under its respective item as specified in the Contract Documents.
- D. The Environmental Consultant will be paid under Item 8.01 S Health and Safety.

8.01 C1.5 PRICE TO COVER

The unit bid price per ton for Item 8.01 C1 must include the cost of furnishing all labor, materials, equipment plan, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of non-hazardous contaminated soil.

Payment will be made under:

ITEM NUMBER DESCRIPTION PAY UNIT

8.01 C1 Handling, Transporting and Disposal of Non-Hazardous Tons

Contaminated Soil

ITEM 8.01 C2 SAMPLING AND TESTING OF NON-HAZARDOUS CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES

8.01 C2.1 WORK TO INCLUDE

A. <u>Description</u>

The work will consist of collecting and analyzing representative samples of soil to be excavated insitu and/or ex-situ from stockpiles for parameters typically requested by the disposal facilities to determine if the soil to be excavated is suitable for reuse, or to be hauled off-site for disposal purposes as contaminated and/or hazardous soil.

B. Sampling and Laboratory Analysis

- At least forty-five (45) days prior to the commencement of work, the Contractor's Environmental Consultant must submit an FSP and an Investigation Health and Safety Plan (Investigation HASP) to OEHS for review and approval, prior to conducting the field sampling. The FSP must include, at a minimum, the following information:
 - a. Project information;
 - b. Description of sample collection methodology for soil which appears to contain contaminants based on PID readings and field observation;
 - c. Type of analyses;
 - d. Sample preservation and handling;
 - e. Training and experience of the personnel who will collect the samples;
 - f. Equipment decontamination;
 - g. Analytical laboratory's name, address, New York State Department of Health's ELAP certification number, and telephone number;
 - h. Map of the project area;
 - i. Sample location plan; and,
 - j. Chain of Custody.

The Investigation HASP must identify actual and potential hazards associated with planned sampling field activities and stipulate appropriate health and safety procedures, so as to minimize field personnel exposures to physical, biological, and chemical hazards that may be present in the sampling media. The Investigation HASP must include, at a minimum, the following information:

- a. Project information;
- b. Description of work to be performed;
- c. Names of responsible health and safety personnel;
- d. Worker training;
- e. Job hazard analysis;
- f. Confined Space Entry Plan (if applicable);
- g. Personal monitoring (if applicable);
- h. Community Air Monitoring Plan (CAMP, if applicable);
- i. Personnel Protection Equipment (PPE);

- j. Decontamination;
- k. Safety rules;
- I. Spill prevention and control, dust control, vapor/odor suppression procedures;
- m. Identification of nearest hospital and route; and,
- n. Emergency Incident Reporting.
- The Contractor's Environmental Consultant must collect one (1) grab sample and one (1) composite sample per 500 cubic yards of soil to be excavated in-situ and/or ex-situ from stockpiles. Sample locations must be placed A) throughout or along areas within the project limits, and B) within any portion of the project area that exhibits any of the characteristics described in Section 8.01 C1.1 A (evidence of potential contamination via elevated PID readings, olfactory or visual evidence). For in-situ sampling, each grab soil sample must be collected from either the 6-inch interval above the water table (when encountered), or the 6inch interval above the bottom of the proposed excavation depth (where recovery allowed), or from the 6-inch interval showing the highest potential for contamination based on field observation. For composite soil sampling, grid sampling must be performed for projects with excavation depth deeper than six (6) feet below grade. Each composite sample must consist of five (5) grab samples and discrete aliquots collected from various intervals along the depth of excavation at each sampling boring location. For stockpiled soils, each composite sample must consist of five (5) grab samples collected from various depths within each soil stockpile, at least two feet below the soil surface. For drummed soil, one (1) composite sample per 10 drums must be collected. Each composite soil sample must consist of one (1) grab sample from each of the 10 drums.
- 3. Laboratory sampling should include analyses for VOCs, Polycyclic Aromatic Hydrocarbons (PAHs), PCBs, Toxicity Characteristic Leaching Procedure (TCLP) Metals (Resource Conservation and Recovery Act [RCRA] 8), the three RCRA Characteristics, ignitability, reactivity, and corrosivity, and Paint Filter Test. Additionally, should the disposal facility(ies) require specific analyses to accept material, the additional analyses should be included at no additional cost to the City.
- 4. Should the Contractor seek to remove non-contaminated excess soils from the site, the Contractor will be required to coordinate the Beneficial Use Determination (BUD) with NYSDEC prior to moving the soils in accordance with the 6 New York Code, Rules, and Regulations (NYCRR) Parts 360.12 and 360.13. The Contractor must keep the Engineer informed of the approval status and removal schedule of any and all soils being removed from the site which are not going to an approved disposal facility.
- 5. The quality of the data from the sampling program is the Contractor's responsibility. The Contractor must furnish all qualified personnel, materials, equipment and instruments necessary to carry out the sampling. Unless directed otherwise, all sampling procedures must follow the NYSDEC sampling guidelines and protocols. All sampling must be conducted by a qualified person trained in sampling protocols using standard accepted practices for obtaining representative samples.
- 6. Each grab and composite sample must be analyzed for all parameters required by disposal facilities accepting contaminated and hazardous soil, in addition to any specific criteria a sample is being analyzed for.
- 7. All sample containers must be marked and identified with legible sample labels, which must indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized and other information that may be useful in determining the character of the sample. Chain-of-custody must be tracked from laboratory issuance of sample containers through laboratory receipt of the samples.
- 8. The Contractor must maintain a bound sample logbook. The Contractor must provide the Engineer access to it at all times and must turn it over to the Engineer in good condition

at the completion of the work. The following information, at a minimum, must be recorded to the log:

- a. Sample identification number;
- b. Sample location;
- c. Field observation;
- d. Sample type;
- e. Analyses;
- f. Date/time of collection;
- g. Collector's name;
- h. Sample procedures and equipment utilized; and,
- i. Date sent to laboratory and name of laboratory.
- 9. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described in subsection 8.01 C2(1)(B)(4) if the situation warrants. The substitute sampling parameters will be of equal or lesser monetary value than those described in subsection 8.01 C2(1)(B)(4), as determined by industry laboratory pricing standards.
- Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the sampling location and must be properly disposed after use.
 - 11. The Contractor's Environmental Consultant must prepare a Field Sampling Result Report (FSSR), tabulate the analytical results, and compare the data to the applicable NYSDEC Part 375.6 SCOs and TCLP for Hazardous Waste published in RCRA and 6 NYCRR Part 371, or 40 CFR Section 261. If the soil is to be disposed of in a disposal facility outside of the State of New York, the soil sampling data must also be compared to the applicable regulatory criteria established by the state in which the disposal facility is located. The FSSR, with the tabulated tables and laboratory analytical data, must be submitted to OEHS for review and approval prior to any soil reuse or disposal activities.
 - 12. Soils exceeding any of the hazardous characteristic criteria meet the legal definition of hazardous soils (rather than non-hazardous contaminated soils) and must be transported or disposed of under Item 8.01 H Handling, Transporting and Disposal of Hazardous Soil. All analyses must be done by a laboratory that has received approval from the ELAP for the methods to be used. The Contractor must specify the laboratory in the MHP.
 - 13. The Contractor must contact the disposal facility where the waste will be sent for permanent disposal, and arrange to collect any additional samples required by the facility. The cost associated with additional sampling and testing must be included in the bid price of this Item.

8.01 C2.2 METHOD OF MEASUREMENT

Quantities for samples must be measured as the number of sets of samples that are tested. A set will be defined as one (1) grab and one (1) composite samples per 500 cubic yards to be analyzed for the full range of parameters as specified in subsection 8.01 C2(1)(B)(3).

8.01 C2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 C2 will include the cost of furnishing all labor, materials, equipment, plan, and insurance necessary for sampling, handling, transporting, testing, documentation, fees, permits, and any other incidentals necessary to complete the work as specified herein for in-situ and ex-situ soil sampling and analysis for waste disposal parameters.

Payment will be made under:

Item No. Description Pay Unit

8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY SETS

HAZARDOUS SOIL FOR DISPOSAL PURPOSES

ITEM 8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL

8.01 H.1 WORK TO INCLUDE

A. General

This work will consist of the handling, transportation, and disposal of hazardous soils, which are defined as soils showing exceedances of TCLP for Hazardous Waste published in RCRA, 6 NYCRR Part 371, or 40 CFR Section 261. Hazardous soil can also be contaminated soils, as defined in Item 8.01 C1, but must be handled, transported, and disposed of as hazardous soil under Item 8.01 H, in accordance with the specifications herein. For the purpose of this specification, soil will be defined as any materials excavated below the pavement and base for pavement. Soil will also be defined as any material excavated from wetlands and/or wetlands adjacent areas, or any areas that are not covered with hard pavement (e.g., concrete, asphalt), such as grass or dirt areas.

The Contractor must ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of hazardous materials are in compliance with the applicable Federal, State, and Local statutes and regulations, including Local Law 72 which becomes effective upon discovery of a TCLP lead exceedance. A sampling report, along with the executive summary, must be transmitted to OEHS within 48 hours of discovery to post on DDC website, as required by Local Law 72.

The Contractor must supply all equipment, material and labor required to conduct the specified work under this section. The Contractor must document the excavation, handling, sampling, and testing, transportation, and disposal of hazardous soils. The City must be listed in the disposal documents as the waste generator.

The Contractor must decontaminate all equipment prior to its removal from the exclusion zone and/or following contact with hazardous materials, as detailed in Item 8.01 S - Health and Safety. Water generated during the decontamination process must be disposed of under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

The Contractor must retain an Environmental Consultant, meeting the requirements specified in Section 8.01 C1, and the Contractor is not permitted to self-perform this work. The Environmental Consultant must conduct sampling for laboratory analysis of soil to be excavated to determine whether the soil is contaminated and/or hazardous.

Hazardous soils are defined as soils showing exceedances of Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels for Hazardous Waste published in Resource Conservation and Recovery Act (RCRA), 6 New York Codes, Rules, and Regulations (NYCRR) Part 371, or 40 Code of Federal Regulations (CFR) Section 261. Hazardous soils must be handled, transported, and disposed of in accordance with the specifications of this section.

All work under Item 8.01 H must be performed under the direct supervision of the Contractor's Environmental Consultant, as approved by the OEHS.

B. <u>Material Handling Plan</u>:

At least 45 days prior to the commencement of work, the Contractor must submit to the OEHS for review an MHP. The MHP must be approved by the OEHS prior to the Contractor beginning any soil excavation work. The MHP must, at a minimum, consist of:

- 1. The Contractor's procedures for identifying hazardous soils during excavation, including the specific model and manufacturer of intended organic vapor monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
- 2. The Contractor's procedures for safely handling hazardous soils or soils which have not yet been tested but are believed to be potentially hazardous. The procedures must include personnel safety and health, as well as environmental protection considerations.
- 3. Name, address, NYSDOH ELAP status and telephone number of the proposed laboratory for analysis of representative soil samples.

- 4. Identification of the Contractor's proposed waste transporter(s). This information must include:
 - 1. Name and Waste Transporter Permit Number;
 - 2. Address:
 - 3. Name of responsible contact for the waste transporter;
 - 4. Telephone number for the contact;
 - 5. All necessary permit authorizations for each type of waste transported; and,
 - 6. Previous experience in performing the type of work specified herein.
- 5. The name and location of the facility where an off-site scale is located. The Contractor must outline the procedures on controlling trucks leaving the work site and enroute to the off-site scale.
- 6. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
- 7. A backup facility must be provided, should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
- 8. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for hazardous soils (primary and back-up) for final disposal of the hazardous soils. Both primary and backup TSD facilities must be currently USEPA or State-approved RCRA TSD facilities for hazardous soils. The information required for each facility must include:
 - a. General Information
 - i. Facility name and the USEPA identification number;
 - ii. Facility location;
 - iii. Name of responsible contact for the facility;
 - iv. Telephone number for contact;
 - v. Signed letter of agreement to accept waste as specified in this Specification. The letter must indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary; and,
 - vi. Unit of measure utilized at disposal facility for costing purposes.
 - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.
 - c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.
 - d. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.
 - e. The Contractor must provide the date of the proposed facility's last compliance inspection under RCRA.

- f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility must be provided. The source and nature of the cause of violation must be stated, if known.
- 9. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 H.2 MATERIALS

- A. The Contractor must provide containers as specified in the USDOT regulations.
- B. The Contractor must provide polyethylene sheeting, which is to be placed under (20 mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.
- C. The Contractor must assure that the waste transporter's appropriate choice of vehicles and operating practices are fitted to prevent spillage or leakage of contaminated material during transportation.
- D. The Contractor must provide, install, and maintain any temporary stockpiling or loading facilities on site as required until completion of material handling activities. The location and design of any such facilities must be included in the MHP.

8.01 H.3 CONSTRUCTION DETAILS

A. Material Handling

- 1. Immediately after excavation of hazardous soil, the Contractor must:
 - a. Load material directly onto drums/trucks/tankers/roll offs for disposal off site. Containers must be labeled as hazardous soil while being held for disposal; or
 - b.If interim stockpiling is required, place hazardous soil on a minimum of 20 mil. polyethylene sheeting and cover it securely with polyethylene sheeting a minimum of 10 mil. to protect against cross contamination, airborne dust, leaching or runoff of contaminants into the subsurface, groundwater, or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the Engineer to prevent tearing or removal by wind or weather. Grade surrounding surface to provide for positive drainage away from pile. Each stockpile must not exceed 500 cubic yards. Hazardous soils must be stockpiled separately from uncontaminated and contaminated soil at an off-site location approved by the Engineer or secured on-site by the Contractor, meeting all required Federal, State and Local stipulations. Stockpiles must be labelled as hazardous soil and situated at least 800 feet away from any sensitive receptors, such as schools, daycare center, hospitals, nursing homes, etc., and at least 100 feet away from any water body.
- 2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the protection of the public from hazardous soils as described in the approved MHP, EHASP, and Item 8.01 S Environmental Health and Safety.
- 3. Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally identified must be segregated in stockpiles and the Environmental Consultant promptly notified to collect soil samples for analysis. Construct stockpiles to the same requirements as stated in subsection (A)(1)(b) above.
- 4. Provide any dewatering that is necessary to complete the work. Contaminated water must be disposed of in accordance with Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.
- 5. Provide and operate field organic vapor test equipment, a PID or an FID, to detect general organic vapor levels at intervals of approximately 50 cubic yards of soil excavated, when visual or odor observations indicate the material may substantially differ from the soil previously excavated and/or as directed by the Environmental Consultant.

C. Off-Site Transportation to Disposal Facility

1. General

- a. The Contractor must furnish all labor, equipment, supplies and incidental costs required to transport hazardous material from the work area to the off-site disposal facility, and any other items and services required for transporting hazardous material for disposal at an off-site facility.
- b. The Contractor is responsible for obtaining the USEPA hazardous waste generator identification number for the City. The application must be submitted to OEHS for review and approval prior to submission to USEPA. The Contractor must prepare the annual hazardous waste report for the project and submit to the NYSDEC and USEPA.
- c. The Contractor will be responsible for tracking all material/vehicles from the site to the off-site scale and to the approved disposal facility.
- d. The Contractor must provide to the Engineer certified tare and gross weight slips for each load received at the accepted facility which must be attached to each returned manifest. These documents must be maintained and kept with project field records.
- e. Hazardous soils must be delivered to the disposal or treatment facility within 30 calendar days after excavation.
- f. The Contractor must coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.
- g. The Contractor must inspect all vehicles leaving the project site to ensure that hazardous soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.
- h. The Contractor must obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments.
- i. The Contractor must provide waste profile forms to OEHS for review and approval before transporting hazardous soil to the approved TSD facility.

2. Hauling

- a. The Contractor must coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities must be measured and recorded upon arrival at the disposal facility. If any deviation between the two records occurs, the matter is to be reported immediately to the Engineer and be resolved by the Contractor to the satisfaction of the Engineer.
- b. The Contractor will be responsible, at its own cost, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
- c. The Contractor must ensure that trucks are protected against contamination by properly covering and lining them with polyethylene sheeting or by decontaminating them prior to and between acceptance of loads. Trucks with loaded hazardous soil must be covered securely with tarp before leaving the project site to prevent generation of airborne dust during hauling.
- d. The Contractor will be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
- e. The Contractor must only use the transporter(s) identified in the approved MHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from NYSDEC may transport hazardous soil. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitute or additional transporters.
- f. The Contractor must develop, document, and implement a policy for accident prevention.

- g. The Contractor must not combine hazardous materials from other projects with material from this project.
 - h. No material will be transported until approval by the Engineer is obtained.

3. Off-Site Disposal

- a. The Contractor must use only the disposal facility(ies) identified in the approved MPH for the performance of the work. A revised MHP or an addendum to the original approved MHP must be submitted to OEHS for review and approval at no additional cost to the City for any use of substitutions or additions of disposal facility.
- b. The Contractor will be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and for ensuring that the facility provides the stated treatment and/or disposal services.
- c. The City reserves the right to contact and visit the TSD facility and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.
- d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the Engineer in the same manner and with the same requirements as for the original facility(ies). This must be done at no extra cost or delay to the City.
- e. The Contractor must obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest must be submitted to the Engineer within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. The signed manifests must be maintained and kept with the project field records. Any manifest discrepancies must be reported immediately to the Engineer and be resolved by the Contractor to the satisfaction of the Engineer.
- f. The Contractor must submit all results and weights to the Engineer.
- g. The Contractor is responsible to pay all fees associated with the generation and disposal of all excavated hazardous waste. These fees include, but are not limited to, the New York State Department of Finance and Taxation (DFT) quarterly fees for hazardous waste and the NYSDEC annual hazardous waste regulatory fee program. The Contractor must submit a copy of proof of payment to the Engineer and OEHS.

4. Equipment and Vehicle Decontamination

- The Contractor must design and construct a portable decontamination station to be used to decontaminate equipment and vehicles that have been used to handle hazardous soil.
 The cost for this work will be paid under Item 8.01 S - Health and Safety.
- b. Water generated during the decontamination process must be disposed of in accordance with Item 8.01 W1 Removal, Treatment, and Discharge/Disposal of Contaminated Water.

8.01 H.4 METHOD OF MEASUREMENT

- A. Quantities for hazardous soils will be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 H3(C)(1)(C), that are capable of generating load tickets.
- B. Final disposal of non-contaminated soil will be paid for under Item 8.01 C1 Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil.
- C. Disposal of decontamination water will be paid for under Item 8.01 W1 Removal, Treatment and Discharge/Disposal of Contaminated Water.
- D. Backfill will be paid for under its respective item as specified in the contract document.
- E. The Environmental Consultant will be paid under Item 8.01 S Health and Safety.

8.01 H.5 PRICE TO COVER

The unit bid price bid per ton for Item 8.01 H will include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of hazardous soil.

Payment will be made under:

| Item No. | Description | Pay Unit |
|----------|--|----------|
| 8.01 H | HANDLING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS SOIL | TONS |

ITEM 8.01 S HEALTH And SAFETY

8.01 S.1 WORK TO INCLUDE

Health and Safety Requirements

A. Scope of Work

It is the Contractor's responsibility to stage and conduct the Contractor's work in a safe manner. The Contractor must implement an EHASP for non-hazardous contaminated or hazardous soil intrusive activities as set forth in OSHA Standards 1910.120 and 1926.650-652. The Contractor must ensure that all workers have at a minimum hazard awareness training. The Contractor must segregate contaminated work area in secured exclusion zones. These zones must limit access to Contractor personnel specifically trained to enter the work area. The exclusion zone must be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area. In addition, the Contractor must protect the public from on-site hazards, including subsurface contaminants associated with on-site activities. The EHASP must be signed off by a Certified Industrial Hygienist and reviewed and approved by OEHS.

Work must include, but not be limited to:

- 1. Implementation of a baseline medical program.
- 2. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and providing all other health and safety measures.
- 3. Providing, installing, operating and maintaining on-site emergency medical first aid equipment as specified in this section for which payment is not provided under other pay items in this Contract.
- 4. Providing, installing, operating, maintaining and decommissioning all equipment and personnel decontamination facilities specified within this section, including, but not limited to, the decontamination pad, decontamination water supply, decontamination water collection equipment and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract.
- 5. Provide the minimum health and safety requirements for excavation activities within the limits of this Contract.
- 6. Implement and enforce an EHASP: The EHASP as presented in these specifications is dynamic with provisions for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The EHASP will also address measures for community protection, accident prevention, personnel protection, emergency response/contingency planning, air monitoring, odor control and hazardous chemicals expected on site. Providing a Confined Space Entry Program as defined in the Occupational Safety and Health Act, Confined Space Entry Standard, 29 CFR 1910.146.

B. <u>Environmental Consulting Services</u>

The Contractor must retain an Environmental Consultant to obtain all permits and perform all field screening, air monitoring, community air monitoring, soil and water sampling, and health and safety services.

1. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its Environmental Consultant must ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated materials must have completed a minimum of forty (40) hours of Health and

Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program must be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Environmental Consultant must provide site specific training.

2. The Contractor must ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations must receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

C. Submittals

- 1. The Contractor must submit a written EHASP, as specified herein, to OEHS for review and approval. The written EHASP must be submitted, within thirty (30) calendar days after the availability of analytical results of the soil and groundwater testing, as required under Section 8.01 C2 and Section 8.01 W2. The Contractor must make all necessary revisions required by OEHS and resubmit the EHASP to OEHS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by OEHS.
- 2. Daily safety logs must be maintained by the Contractor and must be submitted to the Engineer either on request or on completion of the work. Training logs must be maintained by the Contractor and submitted to the Engineer either on request or on completion of the work. Daily logs on air monitoring during excavation activities must be prepared and maintained by the Contractor and submitted to the Engineer either on request or upon completion of the work.
- 3. A closeout report must be submitted by the Contractor to the Engineer upon completion of the work within the defined exclusion zones. This report must summarize the daily safety and monitoring logs and provides an overview of the Contractor's performance regarding environmental and safety issues. The report must carefully document all areas where contamination has been found including pictures, addresses of locations, and potential sources.
- 4. Medical Surveillance Examinations: The Contractor must submit to the Engineer the name, office address and telephone number of the medical consultant utilized. Evidence of baseline medical examinations together with the evidence of the ability to wear National Institute for Occupational Safety and Health (NIOSH) approved respirators (as specified in American National Standards Institute (ANSI) Z88.6) must be provided to the Engineer for all construction personnel who are to enter the exclusion zones.
- 5. Accident Reports: All accidents, spills, or other health and safety incidents must be reported to the Engineer.

D. Health and Safety Plan

The EHASP must comply with OSHA regulations 29 CFR 1910.120/1926.65. This document must at a minimum contain the following:

- 1. Description of work to be performed
- 2. Site description
- 3. Key personnel
- 4. Worker training procedures
- 5. Work practices and segregation of work area
- 6. Hazardous substance evaluation
- 7. Hazard assessment
- 8. Personal and community air monitoring procedures and action levels
- 9. Personal protective equipment

- 10. Decontamination procedures
- 11. Safety rules
- 12. Emergency procedures
- 13. Spill prevention and control, as well as spill reporting procedures
- 14. Dust control, vapor/odor suppression procedures
- 15. Identification of the nearest hospital and route
- 16. Confined space procedures
- 17. Excavation safety procedures

8.01 S.2 MEASUREMENT

Health and Safety Requirements

A. 25% of the lump sum price will be paid when the following items are implemented or mobilized:

Medical surveillance program

Health and safety training

Health and safety plan

Environmental and personnel monitoring

Instrumentation

Spill control

Dust control

Personnel and equipment decontamination facilities

Personnel protective clothing

Communications

Mobilization

- B. 50% will be paid in proportional monthly amounts over the period of work.
- C. 25% will be paid when the operation is demobilized and removed from the project site.

8.01 S.3 PRICE TO COVER

Health and Safety Requirements

The lump sum price bid for the health and safety requirements will include all 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. Providing training, safety personnel, air monitoring and medical examinations as specified.
- B. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and all other health and safety activities or costs not paid for under other pay items in this Contract.
- C. Providing, installing, operating and maintaining on-site emergency medical and first aid equipment. This includes all furnishings, equipment, supplies and maintenance of all medical equipment, and all other health and safety items and services for which payment is not provided under other pay items in this Contract.

D. Providing, installing, operating, maintaining, and decommissioning all personnel and equipment decontamination facilities, including decontamination pad, decontamination water supply, and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract. Vehicle decontamination pads will be included in the price of this item. Disposal of decontamination fluid will be paid for under Item 8.01 W1 – Removal, Treatment, and Discharge/Disposal of Contaminated Water.

E. Spill Control

- Payment will account for furnishing, installing, and maintaining all spill control equipment and facilities. Payment will include equipment and personnel to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage during work within the exclusion zones and handling of excavated soils and liquids from these areas. This collected spill material will be properly disposed of.
- 2. Payment under this item will not include testing, handling, transportation or disposal of petroleum-contaminated/potentially hazardous soils excavated during construction. The price for this work will be paid for under Items 8.01 C1 Handling, Transporting and Disposal of Non-Hazardous Contaminated Soil, 8.01 C2 Sampling and Testing of Contaminated/Potentially Hazardous Soil for Disposal Purposes or 8.01 H Handling, Transporting and Disposal of Hazardous Soil, as appropriate.

F. Dust Control

Payment will account for furnishing, installing, and maintaining dust control equipment and facilities to be used whenever applicable dust levels are exceeded. Payment will include all necessary labor, equipment, clean water, foam, and all other materials required by the Dust Control Plan. The NYSDOH Community Air Monitoring Plan (CAMP) may be used as guidance.

G. Vapor/Odor Suppression

Payment will account for furnishing, installing and maintaining vapor/odor control equipment and facilities to be used whenever organic vapor monitoring or the presence of odors indicates that vapor suppression is required to protect workers or the public. Payment will include all necessary labor, equipment, clean water, foam and all other materials required by the Vapor/Odor Suppression Plan.

H. <u>Mobilization/Demobilization</u>

Mobilization

Payment will include the following, but not be limited to:

- a. All work required to furnish, install and maintain all signs, fencing, support zone facilities, parking areas and all temporary utilities;
- b. All work required to furnish, install, and maintain an office space with phone and utilities for health and safety personnel;
- c. All work required for complete preparation of lay down area for roll-off containers, including sampling, and any required fencing;
- d. All direct invoiced cost from bonding companies and government agencies for permits and costs of insurance; and
- e. All other items and services required for mobilization and site preparation.

2. Demobilization

Payment will include but not be limited to: All work required to sample the area; remove from the site all equipment, temporary utilities and supporting facilities; performance of necessary decontamination and repairs; disposal of disposable equipment and protective gear and other items and services required for complete demobilization.

Payment will be made under:

Item No. Description Pay Unit

8.01 S HEALTH AND SAFETY LUMP SUM

ITEM 8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER

8.01 W1.1 WORK TO INCLUDE

General: This work must consist of the proper removal and disposal of all contaminated groundwater and decontamination water generated during construction operations. The Contractor must be solely responsible for the proper disposal or discharge of all contaminated water generated at the job site. The Contractor will have the option of treating water on-site for discharge to the sewer system or removing contaminated water for off-site disposal. The Contractor must be responsible to choose a method compatible to the construction work and will be compensated on a per day basis regardless of method employed. The Contractor will be compensated for only those days where the system is in full operation.

The Contractor must retain a dewatering/water treatment Specialist (hereinafter the "Specialist") and laboratory as specified under Item 8.01 W2 – Sampling and Testing of Contaminated Water, to conduct any testing that may be required for disposal of impacted water.

The dewatering/water treatment Specialist is responsible to obtain all permits; perform all water sampling, testing; and provide ancillary services related to dewatering and water treatment. The Specialist must at a minimum provide documentation to OEHS demonstrating the minimum requirements as set forth below:

- 1. The Specialist must demonstrate that it has, at a minimum, three (3) years' experience in the design of dewatering plans. The Specialist should demonstrate expertise dealing with issues associated with contaminated water. During that three (3) year period, the Specialist must demonstrate that it provided dewatering and water treatment systems as a routine part of its daily operations.
- 2. The Specialist must be experienced in work of this nature, size, and complexity and must have previous experience in working with the NYSDEC.
- 3. The Specialist must furnish a list of at least five (5) projects completed within the last (3) years, identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value of the projects.
- 4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its Environmental Consultant must ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated material must have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program must be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Specialist will be responsible to provide site-specific training to its employees and other affected personnel.
- 5. The Contractor must ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations must receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

The Contractor must document all operations associated with the handling, sampling and disposal of contaminated water, and ensure that they are in compliance with applicable Federal, State and Local statutes and regulations.

The Contractor must supply all labor, equipment, transport, plant, material, treatment, and other incidentals required to conduct the specified work of this section.

If water will be disposed of into the sewer system, the Contractor must ensure the Specialist treats the water to comply with the New York City Department of Environmental Protection (NYCDEP) Sewer Effluent Limit concentrations prior to discharge. The Contractor is responsible for providing settling or filtering tanks and any other apparatus required by NYCDEP. Alternatively, the Contractor can provide a plan for transport and disposal at an off-site waste disposal facility.

Within forty-five (45) calendar days after award of Contract, the Contractor must submit to OEHS for review and approval, a Water Handling Plan (WHP). The WHP must be approved by OEHS prior to the Contractor's commencement of work. The minimum requirements for the WHP are specified herein Item 8.01W 1.2, for

each type of disposal (disposal into the sewer or off-site disposal). The Contractor must maintain a complete, up to date copy of the WHP on the job site at all times.

8.01 W1.2 CONSTRUCTION DETAILS

For each disposal method the Contractor proposes to utilize (disposal to sewer or off-site disposal), the WHP must include the information required in paragraphs A and B below, as appropriate.

- A. On-site treatment and discharge into New York City sewers.
 - 1. Regulations: The Contractor must comply with all applicable regulations. This includes but may not be limited to:
 - Title 15-New NYCDEP Sewer Use Regulations.
 - 2. Permits: The Contractor is solely responsible to obtain all necessary and appropriate Federal, State and Local permits and approvals. The Contractor will be responsible for performing all and any system pilot tests required for permit approval. This includes but may not be limited to:
 - a. Industrial waste approval for the New York City sewer system.
 - b. Groundwater discharge permit for the New York City sewer system (NYCDEP Division of Sewer Regulation and Control), if discharge to sewer exceeds 10,000 gallons per day.
 - c. The Contractor must comply with NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Runoff from Construction Activity (SPDES General Permit) GP-0-20-001 or its successor.
 - d. Long Island well permit for Brooklyn and Queens sites, if well points are used for dewatering.
 - e. Wastewater quality control application, NYCDEP.
 - 3. The WHP for this portion of the work must include the following at a minimum:
 - a. Identification and design of Contractor's proposed treatment to assure that the water meets the NYCDEP sewer use guidelines prior to discharge to the sewer, including identification of all materials, procedures, settling or filtering tanks, filters and other appurtenances proposed for treatment and disposal of contaminated water.
 - b. The name, address and telephone number of the contact for the Contractor's proposed chemical laboratory, as well as the laboratory's certifications under Federal, State or non-governmental bodies.
 - c. The name, address and telephone number of the contact for the Contractor's proposed Environmental Consultant.
 - d. Copies of all submitted permit applications and approved permits the Contractor have received.

4. Materials

The Contractor must supply all settling or filtering tanks, pumps, filters, treatment devices and other appurtenances for treatment, temporary storage and disposal of contaminated water. All equipment must be suitable for the work described herein.

- 5. Execution
- a. The Contractor is solely responsible for disposal of all water, in accordance with all Federal, State and Local regulations.
- b. The Contractor is solely responsible for any treatment required to assure that water discharged into the sewer is in compliance with all permits and Federal, State and Local statutes and regulations.

- c. The Contractor is solely responsible for the quality of the water disposed of into the sewers.
- d. The Contractor is responsible for sampling and testing of water for the NYCDEP Sewer Effluent Limit concentrations. The quality of the data is the Contractor's responsibility. Any sampling and testing must be conducted and paid in accordance with Item 8.01 W2 Sampling and Testing of Contaminated Water.
- e. The Contractor will be responsible to maintain the discharge rate to the sewer such that all permit requirements are met, the capacity of the sewer is not exceeded and no surcharging occurs downstream due to the Contractor's actions. Dewatering by means of well points or deep wells will not be allowed in the Boroughs of Brooklyn or Queens where the rate of pumping exceeds forty-five (45) gallons per minute unless the appropriate permit has been secured from the NYSDEC.

f. Disposal of Treatment Media

- (1) The Contractor will be responsible for disposal or recycling of treatment media in accordance with all Federal, State and Local regulations.
- (2) The Contractor must provide the Engineer with all relevant documentation concerning the disposal of treatment media, including manifests, bills of lading, certificates of recycling or destruction and other applicable documentation.
- (3) Disposal of treatment media will not be considered a separate pay item; instead it will be considered as incidental work thereto and included in the unit price bid.

B. Off-Site Disposal

- 1. Regulations: The Contractor must conform to all applicable Federal, State and Local regulations pertaining to the transportation, storage and disposal of any hazardous and/or non-hazardous materials as listed in Attachment 2.
- 2. The following must be submitted to the Engineer prior to initiating any off-site disposal:
 - a. (1) Name and waste transporter permit number
 - (2) Address
 - (3) Name of responsible contact for the waste transporter
 - (4) Any and all necessary permit authorizations for each type of waste transported
 - (5) Previous experience in performing the type of work specified herein
 - b. General information for each proposed treatment/disposal facility and at least one backup treatment/disposal facility
 - (1) Facility name and USEPA identification number
 - (2) Facility location
 - (3) Name of responsible contact for the facility
 - (4) Telephone number for contact
 - (5) Unit of measure utilized at facility for costing purposes
 - c. A listing of all permits, licenses, letters of approval and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of the wastes derived from this Contract.
 - d. A listing of all permits, licenses, letters of approval and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued. Provide dates of application(s) submitted. Planned submittals must also be noted.

- e. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste and provide dates of construction and beginning of use, if applicable. Drawings may be provided. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.
- f. The Contractor must provide the date of the proposed facility's last compliance inspection.
- g. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility must be submitted. The source and nature of the cause of violation must be stated, if known. If groundwater contamination is noted, details of the facility's groundwater monitoring program must be provided.
- h. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

Materials

All vessels for temporary storage and transport to an off-site disposal facility must be as required in DOT regulations.

4. Execution

a. General

- (1) The Contractor must organize and maintain the material shipment records/manifests required by Federal, State and Local laws. The Contractor must include all bills of lading, certificates of destruction, recycling or treatment and other applicable documents.
- (2) The Contractor must coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule must be compatible with the availability of equipment and personnel for material handling at the job site.
- (3) The Contractor must inspect all vehicles leaving the project site to ensure that contaminated liquids are not spilling and are contained for transport.
- (4) The Contractor must obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipment. The letter must indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.
- (5) The Contractor must verify the volume of each shipment of water from the site.
- (6) The Contractor is responsible for sampling and testing of water for off-site disposal. The quality of the data is the Contractor's responsibility. Any sampling and testing must be conducted and paid in accordance with Item 8.01 W2 Sampling and Testing of Contaminated Water.
- (7) The Contractor is responsible for any additional analyses required by the TSD facility, and for the acceptance of the water at an approved TSD facility.

b. Hauling

- (1) The Contractor must not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.
- (2) The Contractor must coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities must also be measured and recorded upon arrival at the TSD facility(ies). If any deviation between the two records occurs, the matter is to be reported immediately to the Engineer and must be resolved by the Contractor to the satisfaction of the Engineer.

- (3) The Contractor will be responsible for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site. This cleanup must be accomplished at the Contractor's expense.
- (4) The Contractor will be responsible for inspecting the access routes for road conditions, overhead clearance and weight restrictions.
- (5) The Contractor must only use the transporter(s) identified in the WHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from NYSDEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the Engineer at no additional cost to the City.
- (6) The Contractor must develop, document, and implement a policy for accident prevention.
- (7) The Contractor must not combine waste materials from other projects with material from this project.
- (8) The Contractor must obtain for the City a hazardous waste generator identification number and will sign the manifest as the generator, if necessary.
- (9) No material must be transported until approved by the Engineer.

c. Disposal Facilities

- (1) The Contractor must use only the TSD facility(ies) identified in the WHP for the performance of the work. Substitutions or additions must not be permitted without prior written approval from OEHS, and, if approved, must be at no extra cost to the City.
- (2) The Contractor will be responsible for acceptance of the material at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated material, and that the facility provides the stated storage and/or disposal services.
- (3) The City reserves the right to contact and visit the disposal facility and regulatory agencies to verify the agreement to accept the stated material and to verify any other information provided. This does not in any way relieve the Contractor of the Contractor's responsibilities under this Contract.
- (4) In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be approved in writing by the Engineer in the same manner and with the same requirements as for the original facility(ies). This must be done with no extra cost or delay to the City.

d. Equipment and Vehicle Decontamination

(1) The Contractor must design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting the exclusion zone. The cost for this work will be paid under Item 8.01 S – Health and Safety.

8.01 W1.3 METHOD OF MEASUREMENT

The quantity for on-site treatment and discharge or off-site disposal will be on a per day basis.

8.01 W1.4 PRICE TO COVER

- A. The per day price bid for Item 8.01 W1 will include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transportation, disposal, documentation, permits, hauling, mobilization and demobilization, and any other incidentals thereto to complete the work.
- B. The Contractor will not be paid for water that is within the NYCDEP Sewer Discharge Limits.

Payment will be made under:

Item No. Description Pay Unit

8.01 W1 REMOVAL, TREATMENT AND DISCHARGE/DISPOSAL OF

CONTAMINATED WATER DAY

ITEM 8.01 W2 Sampling And Testing Of Contaminated Water

8.01 W2.1 WORK TO INCLUDE

A. Description

The work will consist of sampling and testing of potentially contaminated groundwater, surface runoff within the excavated area and all contaminated water generated during the decontamination process.

B. Sampling and Testing

- The Contractor is responsible, at a minimum, for sampling and testing of contaminated water for the NYCDEP Sewer Effluent Limit concentrations as listed in Attachment 1, and in accordance with the Engineer-approved FSP and the Investigation HASP, as specified in 8.01 C2. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities must be included in the bid price of this Item.
- 2. All sampling and testing must be conducted by a person trained in sampling protocols using accepted standard practices and/or the NYSDEC sampling guidelines and protocols.
- 3. All sample containers must be marked with legible sample labels which must indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized, how the sample was chilled to 4 degrees Celsius, and other information that may be useful in determining the character of the sample.
- 4. Chain-of-custody must be tracked from laboratory issuance of sample containers through receipt of the samples.
- 5. The Contractor must maintain a bound sample log book. The Contractor must provide the Engineer access to it at all times and must turn it over to the Engineer in good condition at the completion of the work. The following information, as a minimum, must be recorded to the log:
 - a. Sample identification number
 - b. Sample location
 - c. Field observation
 - d. Sample type
 - e. Analyses
 - f. Date/time of collection
 - g. Collector's name
 - Sample procedures and equipment used
 - i. Date sent to laboratory/name of laboratory
- 6. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the site, and must be properly disposed of after use.
- 7. Samples must be submitted to the Contractor's laboratory within the holding times for the parameters analyzed.
- 8. All analyses must be done by a laboratory that has received approval from the NYSDOH's ELAP for the methods to be done. The Contractor must specify the laboratory in the WHP.
- 9. Analytical results for water discharged to the sewer and for off-site disposal must be submitted to the Engineer no later than five (5) days after sample collection.
- 10. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described above, if the situation warrants. The substitute sampling parameters will be of equal or lesser monetary value than those described above, as determined by industry laboratory pricing standards.

8.01 W2.2 METHOD OF MEASUREMENT

Quantities for samples will be measured as the number of sets of samples that are tested for the NYCDEP Sewer Effluent Limit concentrations. A set will be defined as one (1) representative sample analyzed for the full range of NYCDEP parameters as specified in Attachment 1.

8.01 W2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 W2 will include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transport, sampling, testing, documentation, permits, other incidentals necessary to complete the work of sampling and testing of contaminated water. Any additional costs incurred by the Contractor for sampling and testing of contaminated water will be included in the bid price of this Item.

Payment will be made under:

| Item No. | Description | Pay Unit |
|----------|--|----------|
| 8.01 W2 | SAMPLING AND TESTING OF CONTAMINATED WATER | SETS |

SECTION 8.20 - JUTE MESH

8.20.1. DESCRIPTION.

Under this section, the Contractor must furnish and install jute mesh for steep slope protection against erosion where shown on the plans and where otherwise directed by the Engineer.

8.20.2. MATERIALS.

Jute mesh must be of a uniform open plain weave of undyed and unbleached single jute yarn averaging 190 pounds per spindle of 14,400 yards. This yarn must be of a loosely twisted construction having an average twist of not less than 1.6 turns per inch and must not vary in thickness by more than one-half its normal diameter. The width of the jute mesh must be approximately 45" or as specified or approved.

Jute mesh must be woven as follows:

Approximately 60 warp ends per yard of width; Approximately 40 weft ends per linear yard.

Weight of Jute Mesh must average 1.44 pounds per square yard (Plus or minus 5%). The Jute Mesh must be treated so as to be smolder resistant, meeting the following conditions:

The cloth must be made resistant to smoldering and/or after-glow by treatment with non-leaching and non-toxic chemicals. The chemicals must be non-toxic to vegetation and the germination of seed. The chemicals used for this purpose must resist leaching based on the equivalent of two inches of rain. The cloth itself must bear some identification mark to differentiate it from untreated jute cloth.

"Test Method". When a lighted cigarette is placed on the upper or treated surface of the cloth, neither flame nor after-glow will proceed in any direction more than 12" from the original position of the cigarette after it has burned out completely.

Wire staples must consist of 12-inch lengths of No. 11 gauge wire bent to form a "U", or other wire staples as approved.

Wood Pegs must be wedge shaped, approximately 1"x2"x6".

8.20.3. METHODS.

Jute Mesh must be placed on topsoil and seeded areas where directed by the Engineer within areas without stretching so that it lays loosely on the soil and in contact with the soil at all points and then pressed firmly into the soil surface by rolling or tamping. The upper end of each roll of jute mesh must be turned and buried to a depth of six (6) inches, with the soil firmly tamped against it.

Check slots must be constructed at intervals of 50 feet, unless otherwise approved, by placing a fold of jute six (6) inches vertically into the ground with replaced soil tamped firmly against it. Jute mesh must be placed parallel to the slope and musthave a minimum lap of six (6) inches and ends of rolls mustalso have a minimum lap of six (6) inches with the upgrade section on top. Jute mesh must be held tightly to the soil by staples or wood pegs driven firmly into the ground. Staples or wood pegs must be spaced not more than three (3) feet apart, along the

sides of the jute mesh and not more than one (1) foot apart at roll ends, check slots and at other critical areas as determined by the Engineer.

8.20.4. MAINTENANCE.

The Contractor must maintain the areas of jute mesh installation until final acceptance of the contract. Maintenance must consist of providing protection of jute mesh and the repair of areas damaged by equipment, erosion, fire, or other causes, to re-establish the grade and conditions of the area as specified.

8.20.5. MEASUREMENT.

The quantity of Jute Mesh to be paid for will be the number of square yards of ground surface area that has been satisfactorily protected from erosion by the provision and installation of Jute Mesh, within the limits required on the plans or where directed by the Engineer.

8.20.6. PRICE TO COVER.

The unit price bid per square yard for this item, must include the cost of furnishing all labor, materials, plant, equipment, insurance and incidentals necessary to complete the furnishing and installation of jute mesh, all in accordance with the plans, the specifications, and the directions of the Engineer.

Payment will be made under:

| Item No. | Item | Pay Unit |
|----------|-----------|----------|
| 8.20 | JUTE MESH | S.Y |

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.

(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.

(C) Prices.

The asphalt index price and the monthly average posted price are defined as follows:

- 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. <u>Monthly Average Posted Price</u>. The monthly asphalt index prices will be determined by NYSDOT using the methods set forth in NYSDOT Standard Specification Section 698.
 - (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.

(E) Adjustment.

Asphalt price adjustment will be based on the following formulas:

- 1. When price increases: Price Adjustment = (Quantity of Asphalt) x (Monthly Average Posted Price Asphalt Index Price \$15.00)
- 2. When price decreases: Price Adjustment = (Quantity of Asphalt) x (Monthly Average Posted Price Asphalt Index Price + \$15.00)
 - (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.

(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.
 - (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.
 - (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.

(E) Adjustment.

Fuel price adjustment will be based on the following formulas:

1. When price increases: Price Adjustment = (Quantity of Fuel) x (Monthly Average Posted Price - Fuel Index Price - \$0.10)

- 2. When price decreases: Price Adjustment = (Quantity of Fuel) x (Monthly Average Posted Price Fuel Index Price + \$0.10)
 - (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. <enter material group>
- 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. <enter material group>
- (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.
 - 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:

$$Percentage\ Change = \left(\frac{MI - BI}{BI}\right) x\ 100$$

- (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.
- 3. 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:

$$Price\ Adjustment = -\left[\left(\frac{MI - BI}{BI}\right) + 0.05\right](CB)\ Qty$$

(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

(A) 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.

The Section 9.30 below supersedes and replaces Section 9.30 of NYC DOT Standard Specifications dated May 16, 2022

SECTION 9.30 - Stormwater Pollution Prevention

9.30.1. INTENT.

The intent of this section is to address Erosion and Sediment Control (ESC) and pollution prevention during construction and maintenance and guaranty period. The Contractor is advised that within NYC boundaries, in compliance with the Rules of the City of New York Title 15 Chapter 19.1 (15 RCNY Chapter 19.1), DEP is required to review and approve Stormwater Pollution Prevention Plans (SWPPP) that have been prepared to meet the requirements listed in Chapter 19.1. All covered development projects must implement ESC measures in accordance with the NYS Standards and Specifications for Erosion and Sediment Control (also known as The "NYS DEC Blue Book"), dated November 2016 (https://www.dec.ny.gov/chemical/8694.html), as amended.

The objective is to develop and implement a SWPPP that will minimize the pollutants entering the storm sewer systems in compliance with 15 RCNY Chapter 19.1, and the New York State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Runoff from Construction Activity, SPDES General Permit GP-0-20-001 or its successor.

9.30.2. **DEFINITIONS.**

- 1. **Designer –** The Design Engineer or Qualified Professional responsible for the design
- 2. Qualified Inspector A person who is knowledgeable in the principles and practice of erosion sediment control, such as a licensed Professional Engineer, a Certified Professional in Erosion and Sediment Control, or a Registered Landscape Architect.
- 3. Qualified Professional A person who is knowledgeable in the principles and practice of stormwater management and treatment such as a licensed Professional Engineer or a registered landscape architect or other NYSDEC endorsed individuals.
- **4. SWPPP Preparer** Must be a qualified professional. Creates the SWPPP for review and submittal to the SWPTS (as defined in Section 9.30.3). The SWPPP Preparer must certify that the SWPPP was prepared in accordance with RCNY Title 15 Chapter 19.1.
- **5. Trained Contractor-** An employee of the Contractor who has received four hours of NYSDEC endorsed training in the past 3-Years, in the principals and practices of proper erosion and sediment control as required. Such employee must have a certificate of training and wallet card showing their certification number.
- **6.** Owner applicant agency.

9.30.3. SCOPE AND METHODS.

The ESC portion of the SWPPP must include ESC and pollution prevention practices. Practices must be designed in compliance with 15 RCNY Chapter 19.1 and the New York State Standards and NYS DEC Blue Book. Within thirty (30) days after the Contract is registered, the Contractor must submit a completed SWPPP to the NYCDDC Office of Environmental & Hazmat Services (OEHS) for review and acknowledgement. After approval by OEHS, the SWPPP must also be submitted to NYCDEP Stormwater Permitting Unit through the Stormwater Permitting and Tracking System (SWPTS) portal by the SWPPP Preparer for approval.

Contractor and SWPPP Preparer must be registered on SWPTS portal at: https://deppermits.microsoftcrmportals.com/Account/Login?returnUrl=/my-application/

Projects in Municipal Separate Storm Sewer System (MS4) areas require coverage under SPDES General Permit GP-0-20-001 or its successor and a NYCDEP Stormwater Construction Permit. Project areas serviced by a Combined Sewer System (CSS) will only require SWPPP approval from DEP.

The SWPPP must be prepared considering the topography of the subject area. It must also identify potential sources of pollution at the project site that may reasonably be expected to affect the quality of stormwater discharges. The plan must describe the specifics of Post-Construction Stormwater Management Practices (PCSMPs) that are to be used to reduce the pollutants in stormwater discharges, their sequence of implementation and associated design details. All practices included in the SWPPP must be designed in conformance with NYCDEP Stormwater Manual and with the most current version of the Blue Book.

The SWPPP template is available at https://www1.nyc.gov/site/dep/water/stormwater-permits.page.

For the Qualified Professional, the Contractor must retain the services of an independent licensed/certified professional with practical experience in the principles and practices of erosion and sediment control and stormwater management, to prepare and certify a site specific SWPPP, along with all necessary shop drawings. The SWPPP Preparer must verify that the SWPPP has been developed in a manner that will assure compliance with the NYCDEC water quality standards and with the substantive intent of the SPDES General Permit GP-0-20-001 or its successor and 15 RCNY Chapter 19.1.

Construction work must only commence in MS4 areas upon issuance of NYSDEC permit identification number and NYCDEP Stormwater Construction Permit. In addition, an initial inspection must be conducted by the Qualified Inspector certifying that the appropriate control measures specified in the SWPPP have been adequately implemented to the satisfaction of the Resident Engineer (RE) and the OEHS Project Manager (PM). In areas serviced by CSS, Work must not commence until issuance of NYCDEP Stormwater Construction Permit and completion of initial inspection.

The Contractor will be responsible for maintenance of the PCSMPs during the period of construction and the period of guarantee. The Contractor will be responsible for allowing access to DDC and DEP Inspectors during the guarantee period. The Contractor will be responsible for preparing documentation for Stormwater Maintenance Permit Application which includes the final Operation & Maintenance (O&M) Plan with as-built drawings. The maintenance is outlined in Chapter 5 of the NYC Stormwater Manual; however, the Contractor will also be held to maintaining as directed in the design documents and as per the approved Stormwater Construction Permit.

Also, should it be needed, the Contractor will be responsible for preparing the required documents for Lead Agency/landowner to use when renewing the maintenance permit every 5 years as outlined in the NYC Stormwater Manual. At the completion of the guaranty period and upon final approval, the City takes over the responsibility for maintenance.

9.30.4. DEVIATIONS AND AMENDMENTS.

A SWPPP that deviates from the NYCDEP and NYSDEC technical standards must have a section justifying any non-conformance. The justification must include, but not be limited to, the following:

- a. Statement of each deviation from State or City requirements;
- b. Statement of the reasons for each deviation and reasons for supporting adopted alternatives;
- c. Provide information which demonstrates that the deviation or alternative design is equivalent to the Technical Standards; and,
- d. Analysis of the water quality impacts.

In instances when the approved SWPPP is included in the Contract Documents, the Contractor is still responsible for reviewing the SWPPP, updating the Construction team contacts, identifying a need for any major or minor amendments and obtaining OEHS and NYCDEP Stormwater Permitting Unit approvals along with updating coverage under SPDES General Permit.

9.30.5. INSPECTION AND MAINTENANCE.

The Trained Contractor must provide regular inspection and maintenance of the ESC measures which were deployed as part of the Contractor's construction process. Site inspection and Maintenance of ESC must be implemented in accordance with Part IV of SPDES General Permit GP-0-20-001 (or most recent version). The Contractor will also be responsible for maintenance of the PCSMPs which are constructed throughout the construction and period of guarantee according to the requirements of Chapter 5 of the NYC Stormwater Manual or the requirements given in the design documents by the Designer. The Qualified Inspector is responsible to inspect the site at least once every 7-days to assure compliance with the approved SWPPP. The Trained Contractor is also responsible for providing access to NYCDEP or City representatives to inspect the measures for proper maintenance.

9.30.6. CERTIFICATION.

The SWPPP (site logbook) must clearly identify a Trained Contractor for the Contractor and all the Subcontractors that will implement each measure identified in the SWPPP. The Trained Contractors identified in the SWPPP who perform professional services at the site must implement the provisions of the plan and provide certification of the SWPPP in accordance with the provisions of the, NYCDEP Stormwater Construction Permit, the Blue Book, and SPDES General Permit GP-0-20-001 or its successor. The Contractor and all Subcontractors must ensure that updates to construction operations, ESC/PCSMP practices, etc. are communicated/approved by DEP Stormwater Permitting Unit prior to proceeding with implementation. The Lead Agency/landowner is advised that the City must receive yearly certifications that PCSMP's are properly maintained and in support of that certification the Trained Contractor is required to provide a copy of inspections performed.

9.30.7. STABILIZATION.

Stabilization must be implemented in accordance with Part 1.B.1.b of SPDES General Permit GP-0-20-001 or its successor.

9.30.8. CONTRACTOR'S LIABILITY.

The Contractor will be liable for any discharge that either causes or contributes to a violation of water quality standards as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York. Should any stormwater runoff from the site violate the water quality standards, the Contractor will be directed to take immediate steps, at the Contractor's own expense, to rectify the situation and prevent any further sediment from entering the storm sewer system.

In the event that pollutants are discharged to the storm sewer system due to the Contractor's negligence, the RE will direct the Contractor to cease any or all construction activities contributing to the release of these pollutants. The Contractor will be held responsible, at the Contractor's own cost, for any and all necessary actions to remedy the damage.

Furthermore, failure of the Contractor and/or their Subcontractor(s) to strictly adhere to any permit requirements will constitute a permit violation that could result in substantial criminal, civil, and administrative penalties.

It is the Contractor's responsibility to pay all associated permit fees which includes the DEP Stormwater Construction Permitting Fees and SPDES permit fees. DEP Stormwater Construction Permits must be renewed every two years by submitting to DEP no less than 30 days prior to the permit expiration date and must be accompanied by a processing fee in the amount of \$1,000 dollars in addition to a \$2,000 dollar fee per acre of land disturbed or the applicable amount at the time of renewal. NYSDEC SPDES consists of the yearly regulatory fee, the initial authorization fee per acre of land disturbed and per acre of future impervious area. The Contractor is liable for all penalties incurred due to the Contractor's failure to pay these fees on time.

9.30.9. MEASUREMENT.

(A) STORM WATER POLLUTION PREVENTION (Lump Sum)

Payment will be made by lump sum.

Ten percent (10%) of the lump sum price bid will be paid when the SWPPP is "satisfactorily" furnished by the Qualified Professional and accepted by the Department.

Seventy percent (70%) will be paid in proportion to the percentage of construction completion.

Twenty percent (20%) will be paid when the construction and the guaranty period is complete, the Stormwater Maintenance Permit has been granted by NYCDEP, the Notice of Termination (NOT) is filed with NYSDEC, and all SPDES permit fees have been paid. For clarity, the Contractor must include the final twenty percent (20%) in the Contractor's requisition for substantial completion payment; however, this amount will be not payable until completion of the above specified requirements.

(B) STORM WATER POLLUTION PREVENTION (per Month)

The quantity to be measured for payment under this item will be the number of months (to the nearest 1/4-month increment) that the Contractor satisfactorily provides for the Storm Water Pollution Prevention 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 will not begin until the NYCDEP Stormwater Construction Permit is granted and actual SWPPP work is started at the site.

9.30.10 PRICE TO COVER.

Payment will be made at the lump sum price or monthly price bid for the item, which includes, but is not be limited to, the cost of furnishing all the labor, materials, fees, permits and testing required to provide and construct all ESC devices in accordance with the approved SWPPP; providing a Qualified Professional/Inspector to design, report, inspect and monitor the Work; comply with NYCDEP and NYSDEC permitting requirements and all necessary incidentals to complete the Work in accordance with the specifications and the directions of the Engineer.

For PCSMPs the payment for inspection and permitting administration will be paid from the lump sum price bid for the item 9.30 Stormwater Pollution Prevention. However, the cost of labor, materials, and maintenance associated with PCSMPs will be paid under the relevant pay item for PCSMP construction.

Payment will be made under:

| Item No. | Item | Pay Unit |
|----------|----------------------------------|----------|
| 9.30 | STORM WATER POLLUTION PREVENTION | L.S. |
| 9.30 B | STORM WATER POLLUTION PREVENTION | MONTH |

SECTION 9.91 A STEEL SHEET PILING

9.91A.1. <u>Intent.</u> This section describes the work of fabricating, furnishing and placing permanent steel sheet piling.

9.91A.2. **<u>Description.</u>** Under this section, the Contractor must be required to fabricate, furnish, and place permanent steel sheet piling of the type and at the locations shown on the plans or as directed by the Engineer.

9.91A.3 References.

ASTM A36 Standard Specification for Carbon Structural Steel

ASTM A307 Standard Specification for Carbon Steel Bolts and Studs,

60,000 PSI Tensile Strength

ASTM A328 Standard Specification for Steel Sheet Piling

ASTM A690 Standard Specification for High-Strength Low-Alloy Nickel, Copper, Phosphorus Steel H-Piles and Sheet Piling with Atmospheric

Corrosion Resistance for Use in Marine Environments

AWS D1.1 Structural Welding Code - Steel

NYSDOT SECTION 709-05- STUD SHEAR CONNECTORS

The Contractor must conform to the requirements of the above standards and specification, unless otherwise specified herein. In the event of a conflict between these specifications and the referenced standards, the more stringent requirement will control and/or as directed by the Engineer.

9.91A.4 Submittals.

- Equipment Descriptions Contractor must use appropriate equipment as necessary to meet the specified requirements and the methods for proper performance and execution of the work of this Section. provide complete descriptions of sheet piling driving equipment including hammers, extractors, protection caps, leads, guide and other installation appurtenances must be submitted for approval prior to commencement of work.
- 2. Contractor must make such substitutions and modifications, in accordance with the Engineer's requirements, found to be necessary during the progress of the work or/and as directed by the Engineer.
- 3. Shop Drawings Design and Detail Drawings for sheet piling must show complete piling dimensions and details, driving sequence, and location of installed piling. Detail drawings must include details and dimensions of templates and other temporary guide structures for installing piling. Shop Drawing must also show, sheeting length, depth, interlock details and comer details. Detail drawings must provide details of the method of handling and driving piling to prevent permanent deformation, overstress, and damage to coatings and piling interlocks. In addition, the Contractor will submit design calculations along and welding procedures per AWS D1.1.

Certificate of welder's qualifications per AWS D1.1 record to be provided.

4. Material Test Data

a-Sheet piling must be tested and certified by the manufacturer to meet the specified chemical, mechanical, and section property requirements prior to delivery to the site. Testing of sheet piling for mechanical properties must be performed after the completion of rolling and forming operations. Contractor must submit mill test reports showing numerical values of chemical and mechanical properties of sheet piling and structural steel for permanent work, in accordance with the applicable material specifications.

Material Test Record for each testing must be provided to the Engineer

b- Interlocked Joint Strength in Tension Test Data - The interlocked strength in tension test must conform to the piling manufacturer's standard test, include testing at least two 3 inch long coupons taken randomly from different as-produced piling of each heat, and must be approved. Tests will be performed to determine sheet pile interlock strength of two representative test specimens per heat. Joint length must be at least three inches; and minimum interlock strength must be 12,000 pounds per lineal inch. Interlocked Joint Strength in Tension results for each test must be provided to the Engineer

Contractor must review all material test results prior to submittal and must certify conformance with the requirements herein.

- 5. Driving Records: Records of the sheet piling driving operations must be submitted no later than 7 days after driving is completed. These records must provide a system of identification which shows the disposition of approved piling in the work, driving equipment performance data, piling penetration rate data, piling dimensions, and top and bottom elevations of installed piling.
- 6. Pulling and Redriving Contractor must keep records of sheet pile driving. Driving records must include alignment and plumbness checks and must note driving equipment used and locations and depths where difficulty in driving was encountered. The records should be submitted to Engineer on daily basis.

9.91A.5. Materials. Steel Sheet Piling must be of equivalent section to that shown on the plans. Steel Sheet Piling must be new and unused conforming to the requirement of ASTM A690, Grade 50. Stock steel may be used. 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. Sheet piling will be permanent, as indicated on the Contract documents.

All piles must be delivered in one piece. The interlocks of sheet piling must be free- sliding, provide a swing angle suitable for the intended installation, but not more than 5 degrees when interlocked, and maintain continuous interlocking when installed. Sheet piling must

be sections of the dimensions shown on the Contract documents. A section of equal or greater modulus may be provided by Contractor, subject to approval of the Engineer. Sheet piling must be provided with standard pulling holes.

9.91A.6. Methods.

Steel Sheet Piling must be placed in accordance with the plans and directions of the Engineer. Subject to Engineer's approval, steam, pneumatic or Diesel-powered hammers or vibratory hammers must be used to drive all piling. It is contractor's responsibility to choose appropriate hammer system and install sheet piling to design tip elevation without damaging sheet piling.

Contractor must be aware that obstructions may be encountered at certain areas of the site. Any material which stops the driving of steel sheeting piles within a depth of 10 feet from the ground surface at the time of driving, and it is deemed necessary by the Engineer, the Contractor will over excavate to remove the obstruction in order to clear a way for the pile(s), payment for the cost of this over excavation to whatever depth required to remove the obstruction, removing the obstruction and filling to subgrade must be made under the prices bid for the respective contract item(s) labeled:

- a) Item No. 73.31AE0 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS),
- b) Item No. 70.SIEO EXCAVATION OF BOULDERS IN OPEN CUT,
- c) Item No. 70.71SB STONE BALLAST.

All in accordance with NYC DEP Standard Sewer and Water Main Specifications - August 2022. No separate or additional payment will be made for the removal and reinstallation of the pile at the same location and to the depth at which the top of the obstruction was encountered, the cost must be deemed included in the price bid per vertical foot for the respective pile item. Payment for the installation of a pile length at the same location can only be made once, no matter how many times the pile must be removed in order to remove the obstruction. No separate or additional payment will be made for any mobilization or other work incidental thereto. If very compact material or boulders prevent the progression of the steel sheeting to the design tip elevation at a greater depth, the Contractor must notify the Engineer.

Contractor is to note the following:

- a. Examine the areas and conditions under which work of this Section will be performed. Correct all conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- b. Subsoil Information: Historical boring logs and locations are provided for information in the Contract drawings. Contractor is responsible for any conclusions it may draw from this information, including the character of the materials that may be encountered and the degree of difficulty to be expected in the performance of the work.
- c. Contractor is advised that there is no guarantee that materials other than those disclosed by the historical borings will not be encountered, or that

- d. proportions and character of the various materials will not vary from those indicated in the historical boring logs, or that driving effort will not vary from that indicated for test piles.
- e. Alignment of Piling. Contractor must furnish necessary surveying services for establishing sheet piling locations. Any sheet piles driven more than three inches from the location indicated on the Contract documents will n<?t be acceptable.
- f. Sheet Piling must be driven plumb. For permanent work, deviation from plumb position of more than one-eighth inch per foot will be cause for rejection.
- g. Contractor must provide suitable guide structures to ensure that piles and driving equipment are properly aligned during driving. Guide structures must be equipped with suitable devices to avoid damaging protective coatings of piling.
- h. If, at any time, the piling is found to be out of plumb in the plane of the wall, Contractor must provide tapered piles or take other corrective measures to ensure plumbness of the succeeding.
- i. Driving: Piles must be driven to the depths indicated on the Contract documents, or on the Contractor's drawings reviewed and approved by the Engineer.
- j. Permanent sheet piling driven to the required depth and extending above the top elevation indicated on the Contract documents must be trimmed off at that elevation after approval by the Engineer. Contractor must trim the tops of sheet piles damaged to an extent that would prevent proper additional driving, or that would detrimentally affect appearance if exposed in the finished work.
- k. Each sheet pile must be interlocked with adjoining sheet piles for its entire length.
- If the driving of a sheet pile tends to drag an adjacent sheet pile below grade, it must be reported to Engineer prior to any remedial action. Remedial action must be as approved by the Engineer.
- m. Jetting will not be used except as specifically approved by the Engineer.
- n. Temporary wales, templates, master pilings, current deflectors, or guide structures must be provided to ensure that the pilings are placed and driven to the correct alignment. At least two templates must be used in placing each piling and the maximum spacing of templates must not exceed 20 feet.
- o. Pilings must be driven to the tip elevation indicated on the Contract documents, with the proper size hammer and by approved methods so

as not to subject the pilings to damage and to ensure proper interlocking throughout their lengths. Driving/vibratory hammers must be maintained in proper alignment during driving operations by use of leads or guides attached to the hammer. A protecting cap must be employed in driving when using impact hammers to prevent damage to the tops of pilings. Pilings damaged during driving or driven out of interlock must be removed and replaced at the Contractor's expense. Pilings must be driven without the aid of a water jet. Additional costs induced in modifying pile cap, as a result of piles driven out of tolerances, including design costs, will be to Contractor's account. Pilings in each run or continuous length of piling wall must be driven alternately in increments of depth to the required depth or elevation. No piling will be driven to a lower elevation than those behind it in the same run except when the pilings behind it cannot be driven deeper. If the piling next to the one being driven tends to follow below final elevation, it may be pinned to the next adjacent piling. If obstructions restrict driving a piling to the specified penetration, the obstructions must be removed either by excavating, drilling and spudding, or penetrated with a chisel beam. Pilings must be driven to depths shown and must extend up to the elevation indicated for the top of pilings.

- p. Cutting Off Piles driven to the required depth and pilings driven to refusal or to the point where additional penetration cannot be attained and are extending above the required top elevation in excess of the specified tolerance must be cut off to the required elevation. A straight edge must be used in cuts made by burning to avoid abrupt nicks.
- q. Inspection of Driven Piling the Contractor must inspect the interlocked joints of driven pilings extending above ground. Pilings found to be out of interlock must be removed and replaced at the Contractor's expense.
- r. Pulling and Redriving the Contractor must pull selected pilings after driving to determine the condition of the underground portions of pilings when directed. The Engineer may direct the Contractor to pull up to one percent of the driven pilings. Any piling so pulled and found to be damaged must be removed and replaced at the Contractor's expense. Pilings pulled and found to be in satisfactory condition must be redriven when directed at the Contractor's expense. If more than 10 percent of the pulled piles are found to be damaged, the Engineer may request the Contractor to pull an additional one percent of the driven pilings, and remove damaged piles, as described above, at the Contractor's expense.
- 9.91A.7 <u>Quality assurance.</u> Company specializing in performing the work of this Section must have completed at least one project in the last three years. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- 9.91A.8 <u>Product Handling.</u> Contractor must deliver all tools, materials and equipment to job site. Store in a secure location, as approved by the Engineer, to prevent damage, etc.

Materials delivered to the site must be new, undamaged, and accompanied by certified test reports. The manufacturer's logo and mill identification mark must be provided on the sheet piling as required by the referenced specifications. Sheet piling must be stored and handled in the manner recommended by the manufacturer to prevent permanent deformation, overstress, and damage to coatings and the interlocks. Sheet piles must be stored only in approved staging and laydown areas.

Storage of materials must be such that sagging that could produce permanent deformation shall be prevented. Concentrated loads that occur during stacking or lifting must be maintained at less than those that could produce permanent deformation of the material. Handling devices must be so designed that damage to protective coatings is prevented.

9.91A.9. **Measurement.** The quantity to be measured for payment will be the number of square feet of steel sheet piling obtained by multiplying the vertical length of pilings measured between the payment lines herein described, by the horizontal length of piling permanently installed and approved by the Engineer.

NOTE:

- (A) The vertical length of piling is that length measured between the upper and lower payment lines. The upper payment line, unless otherwise specified on the plans or approved by the Engineer, will be at the intersection of the sheeting and the ground surface at the time of commencing work or the specified ground surface at completion of backfilling operations, whichever is higher. The lower payment line will be the installed depth or ordered by the Engineer.
- (B) The horizontal length will be measured along a projection of the piling on a plane parallel to and midway between the front and rear face of the piling wall.

9.91A.10. <u>Price to Cover.</u> The unit price bid per square foot of steel sheet piling will cover the cost of all labor, materials, plant, equipment, waling, bracing, samples, tests and insurances, and incidentals necessary to furnish, deliver, and complete the work, including but not limited to the furnishing of shop drawings, and all stud welding, all in accordance with the plans, the specifications and the directions of the Engineer. The cost of maintaining the excavated area free from earth, water, ice and snow will be included in the price bid for the appropriate excavation item.

Payment will be made under:

| Item No. | Item | Pay Unit |
|----------|------------------------------|----------|
| 9.91 A | PERMANENT STEEL SHEET PILING | S.F. |

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 insure 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.ItemPay UnitHW-900HALLOWANCE FOR CITY WORK ACCELERATIONF.S.



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 SHALL APPLY TO AND BECOME PART OF THE CONTRACT.

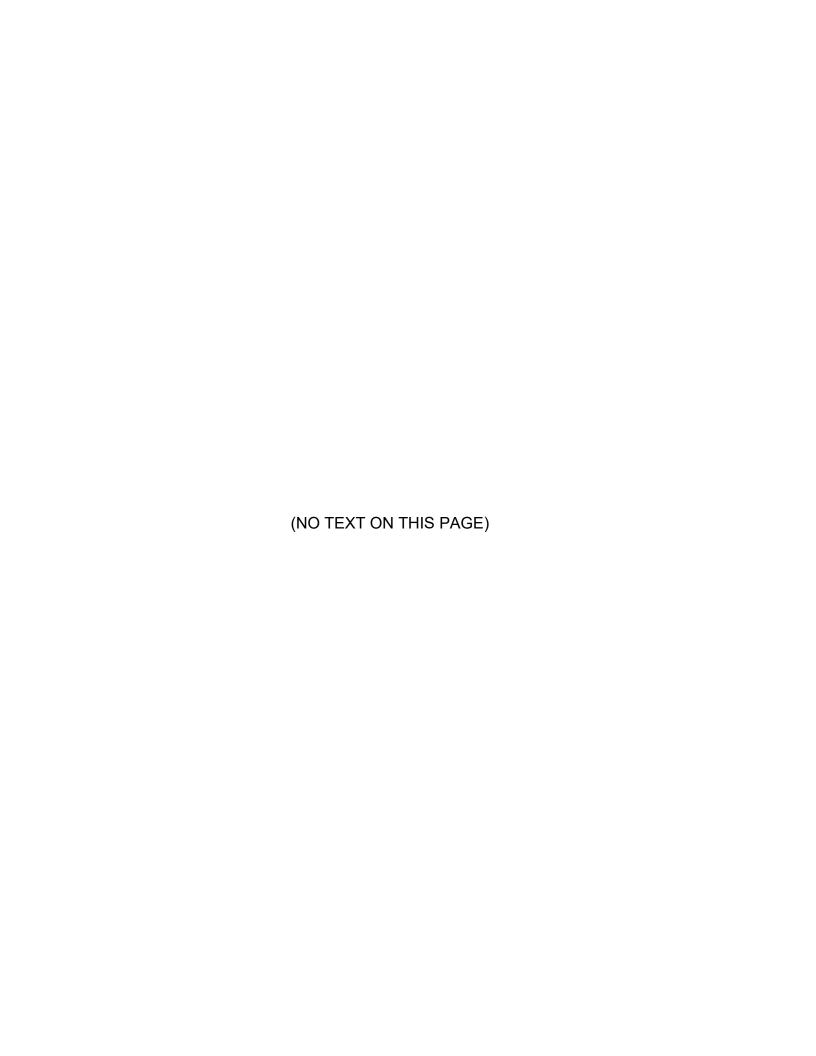


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(NO TEXT)

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(A) GENERAL PROVISIONS

- A. <u>LINES AND GRADES</u>. 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 reestablish 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. <u>SPECIFIC TRAFFIC STIPULATIONS</u>. 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.

The Contractor must plan and schedule the work in order to accommodate all special events listed in the NYCDOT Special Events Annual Calendars. The calendars are available at the following link:

https://nycdot.sharepoint.com/:f:/s/publicshare/Ei2XN4G99_JFkdrtjD_cJ0QBtSPr2xhVrApcqAs1KSLp_eA?e=j276PF

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. <u>HOLIDAY CONSTRUCTION EMBARGO</u>. 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 <u>are not</u> 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.

PROJECT ID: SANDHWSIB

- * 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. <u>CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK</u>. 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. <u>ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES</u>. 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. <u>DISPOSAL OF EXCESS EXCAVATED MATERIAL</u>. 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. <u>NO EXTENSION OF TIME FOR WINTER SHUT-DOWN</u>. 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 <u>NOT</u> 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. <u>PRIVATE UTILITY HARDWARE ADJUSTMENTS.</u> 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. <u>SURVEY MONUMENTS</u>. When working in the vicinity of survey monument the Contractor will hand excavate per Item 8.02 AB-S, 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. <u>FLAGGERS.</u> 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. <u>FUEL COST</u>. 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 contactor 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. <u>START OF CONTRACT WORK</u>. 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. <u>STANDARD WORKING HOURS:</u> In absence of OCMC Traffic Stipulations, Section 1.06.23 (P) of NYC DOT STANDARD HIGHWAY SPECIFICATIONS regarding standard working hours is to be followed is to be followed. Work performed outside the standard working hours must be preapproved by NYC DDC.
- P. <u>TREE BARRIERS</u>. 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.

- Q. <u>UTILITIES</u>. 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.
- R. <u>HOUSE CONNECTIONS</u>. 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.
- S. <u>STREET LIGHT AND TRAFFIC SIGNAL</u>. 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 Mr. Hasib Amini or James Celentano, New York City Department of Transportation at (212) 839-3386/ (212) 839-3129.

- T. <u>SAW CUT</u>. 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.
- U. <u>PRE-CONSTRUCTION STAGE.</u> 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.
- V. <u>EXISTING SEWERS, WATER AND APPURTENANCE</u>. The Contractor is notified that at some locations there may exists 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.
- W. <u>RECONNECTING EXISTING SEWERS TO NEW MANHOLES</u>. 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 "X" IS ONLY APPLICABLE IF ITEMS FOR VIBRATION MONITORING ITEM NO. 76.31 IS IN THE BID SCHEDULE]

X. <u>VIBRATION MONITORING</u>. 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.

Y. <u>CITY ASSETS.</u> 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 "Z" IS ONLY APPLICABLE FOR WATERMAIN 24-INCHES AND HIGHER]

- Z. <u>"AS-BUILT" DRAWINGS FOR WATER MAINS AND APPURTENANCES 24-INCHES (600-MM.) AND LARGER</u>: 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.
- AA. <u>NO ADDITIONAL PAYMENT</u>. 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.
- AB. 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.

AC. <u>ARCHAEOLOGICAL DISCOVERIES</u>. 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 subsurface 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.

AD. <u>USE OF CITY WATER</u>. 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.

AE. 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.

AF. <u>PRICES TO INCLUDE</u>. 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

A. <u>SPECIAL EVENTS</u>. Where the Contractor is notified of a Special Unscheduled Event, such as a civic parade or other official activity, party, etc., then the Holiday Embargo restrictions under Article C, above, shall apply. Temporary restoration of the streets and sidewalks and subsequent removal, if required, for those Special Unscheduled Event periods will be paid for under the appropriate scheduled items 4.02 CB and 6.02 AAN and the Contractor will be granted an extension of time, for the completion of the work, equal to the duration of the ordered shutdown.

B. <u>THE CONTRACTOR IS NOTIFIED</u> that should human remains be encountered during the course of work, the work must be stopped immediately pending the Office of Chief Medical Examiner and the New York Police Department notification and review.

C. VALUE ENGINEERING CHANGE PROPOSAL (VECP)

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").
- I. 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 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.

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- 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.

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- 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.

<u>D. PRICES TO INCLUDE.</u> 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.

PROJECT ID: SANDHWSIB

E. OCMC TRAFFIC STIPULATIONS



Department of Transportation

Ydanis Rodriguez, Commissioner

OCMC TRAFFIC STIPULATIONS

11/22/2022

OCMC FILE NO: REC-22-508 CONTRACT NO: SANDHWSIB

PROJECT: CONSTRUCTION OF ROADWAY IMPREVEMENT IN HUGUENOT AVENUE BETWEEN SHORE AVENUE

AND CHESTER AVENUE

CONSTRUCTION OF ROADWAY IMPREVEMENT IN SWAIM AVENUE BETWEEN SHORE AVENUE AND

CHESTER AVENUE

LOCATION(S): HUGUENOT AVENUE AND SWAIM AVENUE

PERMISSION IS HEREBY GRANTED TO THE NYC DDC AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE LOCATION(S) BELOW FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, SUBJECT TO THE STIPULATIONS, AS NOTED BELOW:

SPECIAL STIPULATIONS

- A. EMBARGOES A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE HOLIDAY EMBARGO OR ANY OTHER SPECIAL EVENT EMBARGOES SUCH AS PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.
- B. BIKE LANES FOR ANY WORK IN OR AFFECTING A BIKE LANE, THE PERMITTEE MUST COMPLY WITH THE MEW GUIDELINES FOR THE MAINTENANCE & PROTECTION OF TRAFFIC PLAN FOR CYCLING, WHICH ARE AVAILABLE AT:

https://www1.nyc.gov/html/dot/downloads/pdf/bike-mpt-guidelines.pdf

- C. BIKE SHARE STATIONS: THE PERMITTEE SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT THE OPERATION OF EXISTING BIKE SHARE STATIONS WITHOUT FIRST CONTACTING NYC BIKE SHARE AT 855-245-3311 FOR THEIR REQUIREMENTS PRIOR TO COMMENCING WORK.
- D. <u>CITYBENCH</u>: THE PERMITIES SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT AN EXISTING CITYBENCH WITHOUT FIRST CONTACTING NYC DOT AT 212-839-6569, OR VIA EMAIL AT CITYBENCH@DOT.NYC.GOV PRIOR TO COMMENCING WORK.
- E. PROTECTION OF NYC DEP GREEN INFRASTRUCTURE: THE PERMITTEE SHALL TAKE PRECAUTION OF NYC DEP GREEN INFRASTRUCTURE IN THE RIGHT-OF-WAY. THE PERMITTEE MUST PROTECT NYC DEP GREEN INFRASTRUCTURE DOWNSTREAM OF THE WORK OR WITHIN FIVE (5) FEET OF THE WORK AREA. THE PERMITTEE MUST EMAIL NYC DEP AT SUSTAINABILITY@DEP.NYC.GOV FOR PROTECTION REQUIREMENTS PRIOR TO COMMENCING WORK, THE PERMITTEE IS RESPONSIBLE FOR RESTORATION OF DAMAGED NYC DEP INFRASTRUCTURE AS DIRECTED BY NYC DEP.
- F. BUS STOPS THE PERMITTEE SHALL PROVIDE WRITTEN NOTICE TO NYC DOT OCMC AND NEW YORK CITY TRANSIT (NYCT) A MINIMUM OF FIVE (5) WEEKS IN ADVANCE FOR LANE/STREET CLOSURES THAT AFFECT BUS ROUTES/BUS STOPS.
- G. STREET LIGHTS / TRAFFIC SIGNALS: THE PERMITTEE SHALL NOT REMOVE OR RELOCATE EXSTING STREET LIGHTS OR TRAFFIC SIGNALS WITHOUT HIST OBTAINING APPROVAL FROM NYCDOT STREET LIGHTING / TRAFFIC SIGNALS UNIT.
- H. TRAFFIC CAMERAS, DETECTION/COMMUNICATION EQUIPMENT: IF AT ANY TIME DURING THE APPROVED WORK, THE PERMITTEE ENCOUNTERS TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIPMENT OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD-WIRED) ON ANY NYC DOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DRAWINGS, THE PERMITTEE SHALL IMMEDIATELY NOTIFY NYC DOT TRAFFIC MANAGEMENT BY PHONE AT 718-433-3390 OR 718-433-3340 AND VIA EMAIL AT MOBILOTINYC.GOV AND AWAIT DIRECTION PRIOR TO CONTINUING WORK.
- METERS THE PERMITTEE SHALL NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718 — 894 — 8651.
- J. TEST PITS THE BELOW TRAFFIC STIPULATIONS DO NOT APPLY TO TEST PIT WORK RELATED TO THIS CONTRACT. WORK HOURS AND OTHER REQUIREMENTS FOR TEST PIT OPERATIONS MAY DIFFER FROM THE STIPULATIONS IDENTIFIED BELOW. THE PERMITTEE SHALL BE REQUIRED TO OBTAIN SEPARATE PERMITS RELATED TO TEST PITS.
- K. TEMPORARY PARKING REGULATIONS/PAVEMENT MARKINGS THE PERMITTEE IS REQUIRED TO INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TEMPORARY PARKING AND REGULATORY SIGNS AND PAVEMENT MARKINGS, AND RESTORE THEIR ORIGINAL CONDITION PER NYC DOT STANDARDS, PRIOR TO EXPIRATION OF THEIR PERMITTEE OR AGENCY PERPORMING PUBLIC OUTREACH SHALL POST AND MAINTAIN ADVSORY SIGNS A MINIMUM OF 48 HOURS PRIOR TO CHANGING EXISTING PARKING REGULATION SIGNS TO APPROVED TEMPORARY CONSTRUCTION PARKING REGULATION SIGNS. THE ADVISORY SIGNS SHOULD BE POSTED ON ALL POLES AND DRIVE RAILS ON THE SEGMENT AFFECTED, INDICATING THE DATE OF THE CHANGE, THE NEW REGULATIONS AND A TELEPHONE NUMBER TO OBTAIN MORE INFORMATION.
- L. ACCESS TO ABUTTING PROPERTIES THE PERMITTEE SHALL COORDINATE ALL ACTIVITIES WITH ABUTTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.
- M. <u>AUTHORIZED PARKING</u> PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE PERMITTEE SHALL SUBMIT IN WRITING, AND COPY OCMC-STREETS, A REQUEST TO OCCUPY SPACE CURRENTLY USED BY AUTHORIZED VEHICLES. APPROVAL MUST BE RECEIVED FROM AUTHORIZED PARKING PRIOR TO OCCUPYING THESE AREAS.

NYC Department of Transportation

Bureau of Permit Management and Construction Control

55 Water Street - 7th Floor, New York, NY 10041

T: 212.839.9637 F: 212.839.8970

www.nyc.gov/dot

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PROJECT: CONSTRUCTION OF ROADWAY IMPREVEMENT IN HUGUENOT AVENUE BETWEEN SHORE AVENUE AND

CHESTER AVENUE

CONSTRUCTION OF ROADWAY IMPREVEMENT IN SWAIM AVENUE BETWEEN SHORE AVENUE AND CHESTER AVENUE

N. NOTIFICATION — THE PERMITTEE MUST AT LEAST TWO (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION NOTIFY THE NYC FIRE
DEPARTMENT, NYC POLICE DEPARTMENT, NYCEMS, LOCAL COMMUNITY BOARD, BOROUGH PRESIDENT'S OFFICE-CHEF ENGINEER, NYCDOT
OCMC OFFICE AND ALL ABILITING PROPERTY OWNERS.

CONSTRUCTION INFORMATIONAL SIGNS — THIS PROJECT REQUIRES A CONSTRUCTION PROJECT INFORMATIONAL SIGN (CPIS) IN
ACCORDANCE WITH NYCDOT HIGHWAY RULE SECTION 2-02 (4) AND (5), CRITERIA AND A PROTOTYPE FOR THIS SIGN MAY BE FOUND ON THE
NYCDOT WEBSITE AT:

HTTP://WWW.NYC.GOV/HTML/DOT/DOWNLOADS/PDF/DOT. CPS. DIRECTIONS.PDF

I. MAINTENANCE AND PROTECTION OF TRAFFIC

A. HUGENOT AVENUE BETWEEN CHESTER AVENUE AND SHORE AVENUE/ DEAD END

B. SWAIM AVENUE BETWEEN CHESTER AVENUE AND SHORE AVENUE/DEAD END

- Work hours shall be as follows: 7:00 AM 6:00 PM
 - Monday Friday
- During working hours, the contractor shall maintain one-12 ft. lane for two-way traffic.
- Flagmen must be provided at both ends of the work zone to regulate traffic and to assist pedestrians during working hours.
- The contractor shall maintain either a minimum 5 ft. clear sidewalk or 5 ft. wide temporary protected pedestrian walkway on the roadway depending on the construction needs.
- The contractor shall always maintain access to adjacent properties.
- 6. After working hours, the contractor shall restore all travelling lanes for traffic.

C. INTERSECTION OF HUGENOT AVENUE AND CHESTER AVENUE

D. INTERSECTION OF SWAIM AVENUE AND CHESTER AVENUE

- Work hours shall be as follows: 7:00 AM 6:00 PM Monday Friday
- During working hours, the contractor shall maintain ONE-12 ft. lane for two-way traffic on both roadways.
- Flagmen must be provided to regulate traffic and assist pedestrians during working hours.
- 4. The contractor may occupy/close one crosswalk at a time.
- 5. After working hours, the contractor shall restore all travelling lanes to traffic.

III. GENERAL NOTES

- A. THIS IS NOT A PERMIT. THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.
- B. THE PERMITTEE MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.
- C. THE PERMITTEE SHALL COMPLY WITH ALL REQUIREMENTS OF THE NYCDOT SPECIAL EVENTS UNIT AS IDENTIFIED BELOW;

Street Fairs / Festivals

- ALL EXCAVATIONS MUST BE PLATED WITH SKID RESISTANT PLATES.
- PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

2. RUNNING / WALKING / BIKING EVENTS

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

PARADES

ALL EXCAVATIONS MUST BE BACKFILLED AND PAYED OR PLATES MUST BE RECESSED AND PAYED OVER FLUSH WITH PAYEMENT.

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PROJECT: CONSTRUCTION OF ROADWAY IMPREVEMENT IN HUGUENOT AVENUE BETWEEN SHORE AVENUE AND

CHESTER AVENUE

CONSTRUCTION OF ROADWAY IMPREVEMENT IN SWAIM AVENUE BETWEEN SHORE AVENUE AND CHESTER AVENUE

- FORMATION AND DISPERSAL AREA PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT (PLATES MUST BE SKID RESISTANT).
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

4. MAYORAL EVENTS

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.
- D. ALL RELOCATION WORK BY THE UTILITIES SUCH AS; CON EDISON, TELEPHONE, GAS AND CABLE COMPANIES SHALL PRECEDE THE CONTRACTORS' START OF WORK ON ALL AFFECTED ROADWAYS IN THE IMPACTED CONTRACT AREA.
- E. THE CONTRACTOR IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE CONTRACTOR MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.
- F. THE PERMITTEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, WRITTEN APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, WRITTEN APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITTEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.
- G. THE PERMITTEE SHALL ADHERE TO THE NYCDOT BUREAU OF BRIDGES' SPECIAL PROVISIONS FOR LANDSCAPE PROTECTION, MAINTENANCE AND RESTORATION, ITEMS 1.18.15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITTEE'S ACTIVITIES OCCUR WITHIN A LIMITED ACCESS ARTERIAL HIGHWAY RIGHT - OF - WAY.
- H. NO DEVIATION OR DEPARTURE FROM THESE STIPULATIONS WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL FROM THE OCMC-STREETS. REQUEST FOR SUCH MODIFICATIONS SHALL BE SUBMITTED TO THE OFFICE OF THE OCMC-STREETS, NEW YORK CITY DEPARTMENT OF TRANSPORTATION, A MINIMUM OF TWENTY (20) DAYS IN ADVANCE FOR CONSIDERATION.
- FOR ANY CONSTRUCTION ACTIVITY RESULTING IN THE FULL CLOSURE OF A ROADWAY FOR MORE THAN 180 CONSECUTIVE CALENDAR
 DAYS, THE CONTRACTOR MUST PRODUCE AND SUBMIT A COMMUNITY REASSESSMENT, IMPACT AND AMELIORATION (CRIA) STATEMENT
 TO NYCDOT PLANNING AND OBTAIN THEIR APPROVAL BEFORE APPLYING FOR PERMITS, IN COMPLIANCE WITH THE PROVISIONS OF
 LOCAL LAW 24 STREET CLOSURE LAW.
- J. FOR THIS PROJECT THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY ADVANCE WARNING AND DETOUR SIGNS, TEMPORARY CONTROL DEVICES, BARRICADES, LIGHTS AND FLASHING ARROW BOARDS IN ACCORDANCE WITH THE "MANUAL ON UNFORM TRAFFIC CONTROL DEVICES," THE TYPICAL SCHEMES INCLUDED IN THIS SPECIFICATION; AND AS ORDERED BY THE ENGINEER-IN-CHARGE AND THE O'CMC-STREETS.
- K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING HIS CONSTRUCTION SIGNAGE. THE IDENTIFICATION SHALL INCLUDE THE CONTRACTOR'S NAME, SPONSORING AGENCY NAME AND THE CONTRACT NUMBER. THE IDENTIFICATION SHALL BE PLACED ON THE BACK OF THE SIGN. THE LETTERING SHALL BE THREE (3) INCHES HIGH.
- L. THE OCMC-Streets reserves the right to void or modify these stipulations should construction fail to commence within two (2) years of the signed date of these stipulations.

GARY SMALLS DIRECTOR OCMC PROJECT MANAGER
OCMC-STREETS

PROJECT ID: SANDHWSIB

(C) SEWER & WATER MAIN PROJECT SPECIFIC PROVISIONS

(NO TEXT)

(D) GREEN INFRASTRUCTURE PROVISIONS

(NO TEXT)

FEMA - PAGES: FEDERAL EMERGENCY MANAGEMENT AGENCY PROJECTS

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 (01/20/2021)
 - FEDERAL EMERGENCY MANAGEMENT AGENCY ("FEMA") RIDER (01/20/2021)
 - 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.

(NO TEXT ON THIS PAGE)

UNIFORM FEDERAL CONTRACT PROVISIONS RIDER FOR FEDERALLY FUNDED PROCUREMENT CONTRACTS

(Version 01.20.2021)

[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 HUD's CDBG Program, CDBG-DR Program, or by FEMA must also include the program-specific rider.]

- **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 (v) 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 (v) 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 contractreimbursable 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 (d), the basis of settlement shall be as provided for in subparagraph (v) 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 as amended (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 or affiliates are currently in a state of debarment, suspension, exclusion, disqualification, or other ineligible status as a result of prior performance, failure, fraud, or violation of City or New York State laws. The Contractor further certifies that neither it nor its principals or affiliates are debarred, suspended, excluded, disqualified, or otherwise ineligible for participation in Federal assistance programs. The City reserves the right to terminate this Contract if knowledge of debarment, suspension, exclusion, disqualification 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 § 200.323, Contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. 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) Prohibition on certain telecommunications and video surveillance services or equipment.
 - (a) The Contractor is prohibited from obligating or expending loan or grant funds to:
 - (1) Procure or obtain;
 - (2) Extend or renew a contract to procure or obtain; or
 - (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115–232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

- (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- (b) In implementing the prohibition under Public Law 115–232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- (c) The Contractor's attention is directed to Public Law 115–232, section 889 for additional information.
- (d) The Contractor's attention is directed to § 200.471.
- (9) Domestic preferences for procurements.
 - (a) As appropriate and to the extent consistent with law, the Contractor should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
 - (b) For purposes of this section:
 - (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - (2) "Manufactured products" means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.
- (10) 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.

- (11) Records Retention. The Contractor shall retain all books, documents, papers, and records relating to the services performed under the Contract in accordance with 2 C.F.R. §200.334.
- (12) 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.
- (13) 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;
 - 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.
- (14) *Intangible Property.*
 - a. Pursuant to 2 CFR § 200.315, 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. Copeland Anti-Kickback Act: If required by the federal program legislation and subject to any other federal program limitations: (i) the Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. Part 3 as may be applicable, which are incorporated by reference into this Contract; (ii) The Contractor or subcontractor shall insert in any subcontracts the language contained in (i) of this subsection and also a clause requiring the subcontractors to include the language in subsection (i) in any lower tier subcontracts. The Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor of this subsection; and (iii) A breach of

this subsection may be grounds for termination of the Contract, and for debarment as a contractor or subcontractor as provided in 29 C.F.R. § 5.12.

- 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. If there is a conflict between the provisions of this Article D and FEDERAL EXHIBIT 2, the stricter standard shall be controlling.
- (2) Equal Employment Opportunity. Executive Order 11246, as amended, 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 as amended, 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, sexual orientation, gender identity, 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) <u>Equal Opportunity Clause</u> (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 ad (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.
- vii. "Statutory period" means the one-year period before the effective filing date of a claimed invention during which exceptions to prior art exist per 35 U.S.C. 102(b), as amended by the Leahy-Smith America Invents Act, Public Law 112-29.
- viii. The "contractor" means any person, small business firm or nonprofit organization, or as set forth in section 1, paragraph (b)(4) of Executive Order 12591, as amended, any business firm regardless of size, which is a party to a funding agreement.
- 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 a patent, a printed publication, public use, sale, or other availability to the public 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. If the Contractor files a provisional application as its initial patent application, it shall file a non-provisional application within 10 months of the filing of the provisional application. The Contractor will file patent applications in additional countries or international patent offices within earlier ten months of the first filed patent application or six months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
- iv. For any subject invention with Federal agency and contractor co-inventors, where the Federal agency employing such co-inventor determines that it would be in the interest of the government, pursuant to 35 U.S.C. 207(a)(3), to file an initial patent application on the subject invention, the Federal agency employing such co-inventor, at its discretion and in consultation with the contractor, may file such application at its own expense, provided that the contractor retains the ability to elect title pursuant to 35 U.S.C. 202(a).
- v. Requests for extension of the time for disclosure, election, and filing under paragraphs (i), (ii), and (iii) of this clause may, at the discretion of the Federal agency, be granted. When a contractor has requested an extension for filing a non-provisional application after filing a provisional application, a one-year extension will be granted unless the Federal agency notifies the contractor within 60 days of receiving the request.
- 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) of this clause, or elects not to retain title.,
- ii. In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in (c) of this clause, 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 non-provisional patent application for, to pay a maintenance annuity or renewal fee on, or to defend in a 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 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), of this clause, to assign to the Contractor the entire right, title and interest in and to each subject invention made under Contract, 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 paragraph (c)(1) of this clause. 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. For each subject invention, the contractor will, no less than 60 days prior to the expiration of the statutory deadline, notify the Federal agency of any decision: Not to continue the prosecution of a non-provisional patent application; not to pay a maintenance, annuity or renewal fee; not to defend in a reexamination or opposition proceeding on a patent, in any country; to request, be a party to, or take action in a trial proceeding before the Patent Trial and Appeals Board of the U.S. Patent and Trademark Office, including but not limited to post-grant review, review of a business method patent, inter partes review, and derivation proceeding; or to request, be a party to, or take action in a non-trial submission of art or information at the U.S. Patent and Trademark Office, including but not limited to a pre-issuance submission, a post-issuance submission, and supplemental examination..
- 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 subcontractor. 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.
- iii. In the case of subcontracts, at any tier, when the prime award with the Federal Agency was a contract (but not a grant or cooperative agreement), the Agency, subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the Federal Agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract

Disputes Act in connection with proceedings under paragraph (j) of this clause.

- 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:
 - 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 Federal Aency may review the Contractor's licensing program and decisions regarding Small Business applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Federal Agency when the Federal Agency's review discloses that the Contractor could take reasonable steps to implement more effectively the requirements of this paragraph (k)(iv). In accordance with 37 CFR 401.7, the Federal agency or the contractor may request that the Secretary review the contractor's licensing program and decisions regarding small business applicants.

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.

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>Goal</u> | | |
|---------------------------|-------------|----|------|
| <u>Trade</u> | (percent) | | |
| 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 made 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]

FEDERAL EMERGENCY MANAGEMENT AGENCY & FEDERAL LABOR STANDARDS PROVISIONS

FEDERAL EMERGENCY MANAGEMENT AGENCY ("FEMA") RIDER (1/20/2021)

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. <u>Suspension and Debarment</u>. 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. <u>Davis-Bacon Act</u>. 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. <u>Rights to Inventions Made Under a Contract or Agreement</u>. 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. <u>Copeland "Anti-Kickback" Act</u>. 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. <u>Contract Work Hours and Safety Standards Act</u>. 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.
- (d) In compliance with the Disaster Recovery Act of 2018, the City of New York and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.
- 7. <u>Logos</u>. 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. <u>Compliance with Law.</u> The Contractor acknowledges that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.
- 9. <u>Federal Government not a Party</u>. 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. <u>False Claims</u>. The Contractor acknowledges that 31 U.S.C. Chap. 38 applies to the Contractor's actions pertaining to this contract.

Federal Labor Standards Provisions (<u>Non-Davis Bacon</u>)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. <u>Compliance with the Contract Work Hours and Safety Standards Act</u>. 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-halftimes 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.

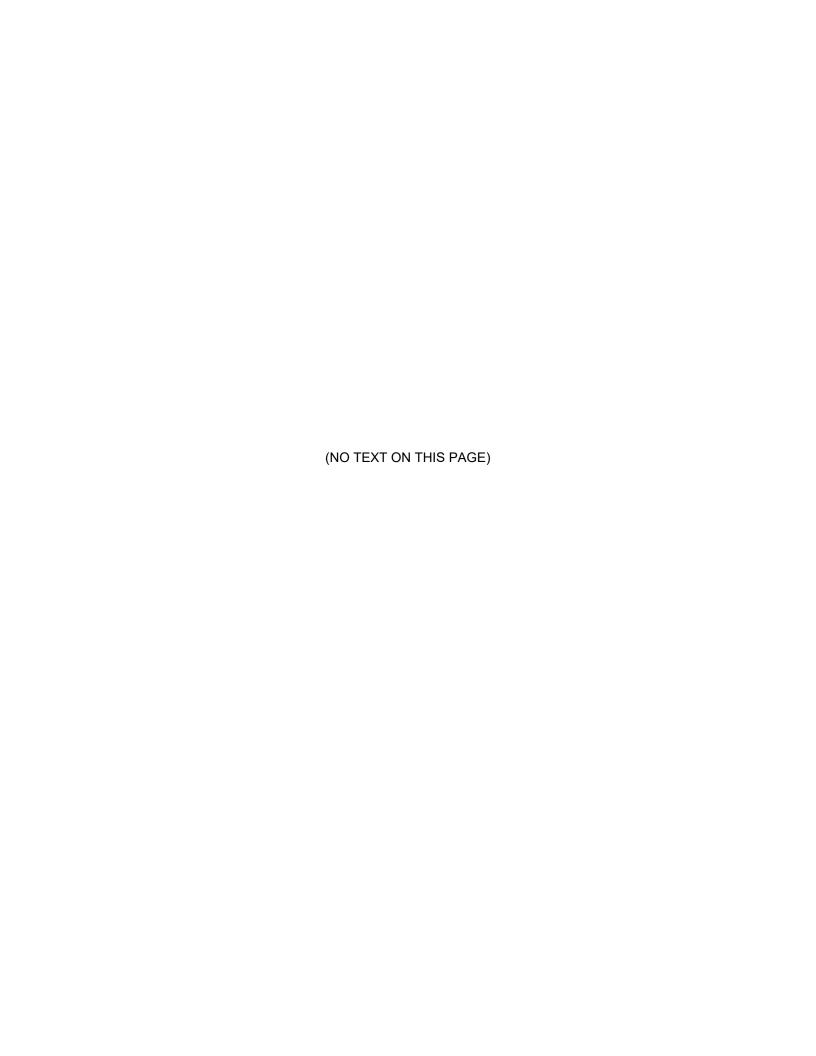
- 3. Withholding for unpaid wages and liquidated damages. The City of New York shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor 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. <u>Health and Safety</u>. 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.

SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS

NOTICE

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection, Sewer Design Standards of the Department of Environmental Protection, Water Main Standard Drawings of the Department of Environmental Protection, Specifications For Trunk Main Work of the Department of Environmental Protection and the Standard Highway Specifications of the Department of Transportation of The City of New York, must 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



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 I-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 must notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Noel Leon (LEONN@coned.com) / Dennis Brady (BradyD@coned.com) at (718) 802-3013/ (917) 608-3435.

(2) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor must notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. (Neville.Jacobs@nationalgrid.com) 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. Aubrey Makhanlall (Aubrey.n.makhanlall@verizon.com) at (516) 758-3705/ (718) 977-8165.

(2) <u>Refer</u> to Subsection 10.21 - Contractor To Notify City Departments, Page 21: <u>Add</u> the following to Subsection 10.21:

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor must notify Ms. Peter Gordon, P.E. Chief, Infrastructure, at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at (718) 595-7434 at least thirty (30) days prior to the start of construction.

(2) NEW YORK CITY FIRE DEPARTMENT

The Contractor must notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin(Edward.Durkin@fdny.nyc.gov) at (718) 281-3933.

(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor must notify Mr. Hasib Amini /Akmal Mikhai - Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3386 / (212) 839-3368, at least seventy-two (72) hours prior to the start of construction.

(4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor must notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Daniel Grulich (Daniel.Grulich@parks.nyc.gov) at (718) 760-6927.

(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 must notify the Transit Authority at least two (2) weeks prior to the start of construction.

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) <u>Refer</u> 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 must refer to the Traffic Stipulations and additional subsections that are included in B section of S-Pages, and as directed by the Engineer.

- (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 <u>not</u> 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 here before 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 will 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 will 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 will 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
- (b) Diameter of Well Points
- (c) Spacing of Well Points
- (d) Length to Screen
- (e) Depth to Bottom of Screen
- (f) Static Water Level
- (a) Drawdown Required

- (h) Total Volume Pumped
- (i) Number of Pumps
- (j) Capacity of Pumps
- (k) Duration of Pumping
- (I) Initial and Average GPM
- (m) Estimated Daily Pumpage
- (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 | рН | 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) <u>Refer</u> 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 to the Highway Construction Plans, Details and Specifications for SANDHWSIB.
 - (2) In street areas requiring sewer and water main work outside the limits of highway reconstruction the permanent restoration shall be as follows:
 - (A) Huguenot Avenue between Chester Avenue and Shore Road (Dead End) Swaim Avenue between Chester Avenue and Shore Road (Dead End)
 - (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 as shown on the Utility Plan and Profile.
 - (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:

| (I) Payment for pavement res | toration snall be made under the | e following items: |
|------------------------------|--|--|
| ITEM NO. | ITEM | PAYMENT DESCRIPTION |
| 4.02 AB-R | Asphaltic Concrete Wearing
Course, 1-1/2" Thick | (For asphaltic concrete wearing course top course when <u>no</u> overlay is required.) |
| 4.02 AF-R | Asphaltic Concrete Wearing
Course, 2" Thick | (For 2" asphaltic concrete wearing course overlay from curb to curb or edge to edge.) |
| 4.02 CA | Binder Mixture | (For binder mixture base course over trenches and cutbacks; binder mixture top filler course under asphaltic concrete wearing course when no overlay is required; binder mixture top course when overlay is required; binder mixture in Type A and B Keys; and binder mixture to fill in roadway depressions and to provide a leveling course prior to overlay where ordered.) |
| 4.02 CB | Asphaltic Concrete Mixture | (For thin shims where necessary and ordered) |
| 4.04 H | Concrete Base For
Pavement, Variable
Thickness For Trench
Restoration, (High-Early
Strength) | (For concrete base course over trenches and cutbacks.) |
| 6.67 | Sub-base Course, Select
Granular Backfill | (For subbase course of nine (9) inches select granular material) |
| 6.68 | Plastic Filter Fabric | (For plastic filter fabric below
nine (() inches granular
material) |

C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

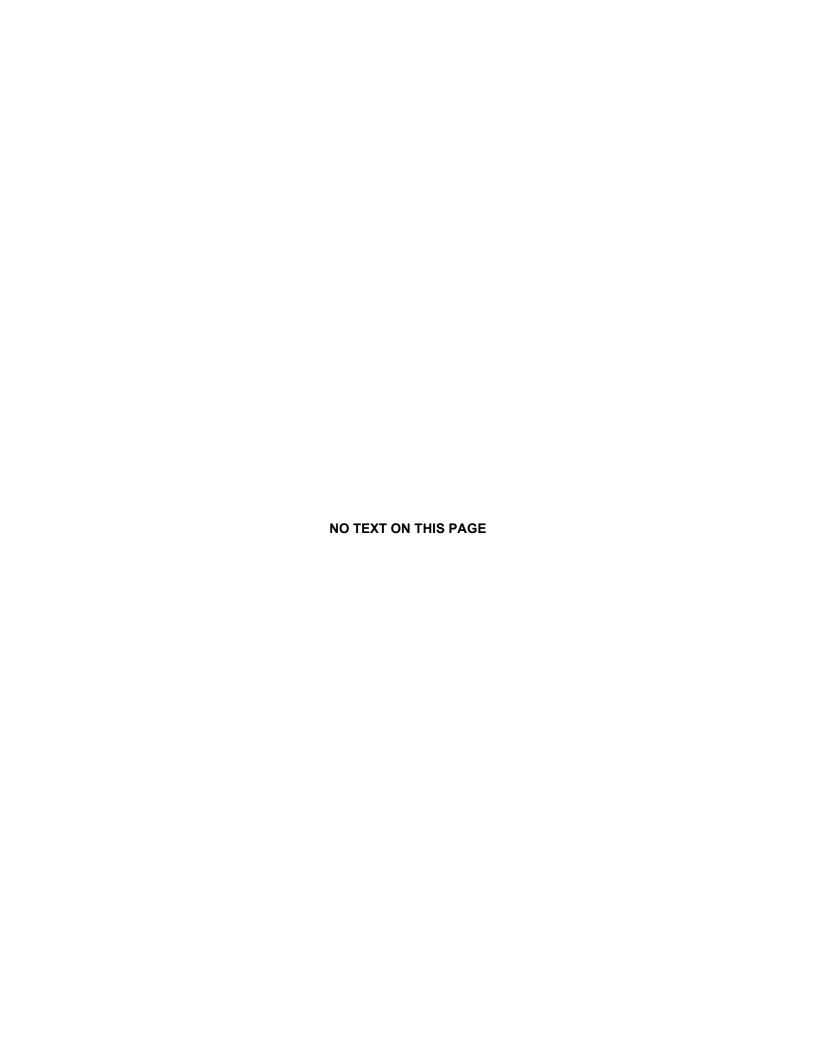
1) Refer to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 11. Fabrication:, Page 4;
Add the following to Section 11:

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.

END OF SECTION
This Section consists of Ten (10) Pages



BMP - PAGES SPECIFICATIONS FOR CONSTRUCTION OF **BEST MANAGEMENT PRACTICE (BMP) AND MITIGATION AREA**

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.

The Huguenot Avenue and Swaim Avenue Infrastructure Improvements Project

Specifications for Erosion and Sedimentation Control Measures

Annadale, Staten Island, NY

Capital Project No.: SANDHWSIB CEQR No.:

Prepared for:

New York City Department of Transportation
On Behalf of the New York City Department of Design and Construction (NYCDDC) and the New York City Department of Environmental Protection (NYCDEP)

Prepared by:

NV5 WSP

January 2023

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| 7.517 | No Text | |

7.500 SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

Under soil erosion and sedimentation control work, the Contractor must provide all labor, materials, tools and equipment necessary to complete the execution of the work in complete accordance with the Specifications and all Contract Drawings. All Soil Erosion and Sedimentation Control work must be done in conformance with and subject to the renewed State Pollutant Discharge Elimination System (SPDES) General Permits for Discharges Stormwater from Construction Activity, GP-0-20-001, and the latest edition of the New York State Standards and Specifications for Erosion and Sediment Control, 2016, published by the New York State Department of Environmental Conservation, including, but not limited to, the following methods of erosion and sedimentation control.

- 1. Slopes left exposed will, within 30 working days of completion of any phase of grading, be planted or otherwise provided with ground cover device, or structures sufficient to restrain erosion.
- 2. A ground cover sufficient to restrain erosion must be planted or otherwise provided within 15 working days on that portion of the tract (disturbed area) upon which further active construction is not being undertaken.

The Contractor must submit for approval by the Engineer and NYSDEC, a written Erosion and Sedimentation Control Plan, prepared by a Certified Professional in Erosion and Sediment Control (CPESC), who is a Professional Engineer (P.E.) or under the supervision of a P.E. The Erosion and Sediment Control Plan must be signed and sealed by that CPESC and/or the supervising P.E. The Plan must comply with all conditions of all applicable permits issued by NYSDEC.

The Erosion and Sedimentation Control Plan must conform to the guidelines as set forth in the latest edition of the New York State Standards and Specifications for Erosion and Sediment Control, 2016 and the Contractor must implement the followings:

- No stockpiling of excavated material would be allowed in a manner or location that would permit erosion and its subsequent sedimentation in wetlands or other natural areas.
- No storage of soil must be permitted within the Contract limits. Soil is deemed to be for this requirement any sediment including material such as topsoil fill, sand, any excavated material, boulders, stones, cold patch, etc.

- Storm sewers will be installed in a sequence and manner that reduces the time during which the tops of excavated areas would be exposed and vulnerable to erosion.
- At the end of each day's work, the street where sewers are being installed will be cleaned and swept to reduce the amount of soil that could potentially impact downstream areas as sediment. The Contractor must be required to have a street sweeper on the site.
- Use truck tracking pads at the construction access locations to remove sediment from the tires of the trucks and other construction equipment prior to driving on the adjacent streets.
- Utilize sediment basins, sediment traps and/or sediment filters in the erosion control plan to capture sediment form run-off and from water produced by dewatering operations.
- Use portable sediment tanks to remove sediment from water generated by dewatering operations. All water from dewatering must be treated before discharge into any surface water bodies, unless the turbidity of the effluent is less than the ambient level of the receiving water body as measured by the turbidity meter in standard units (i.e. NTU's).
- The Contractor must supply all portable equipment.
- Use construction limiting fence, and silt fence as shown on Contract Drawings, unless otherwise directed by the Engineer.
- Schedule work in wet areas, such as the mitigation site, during relatively dry summer months.
- Employ water diversions to direct the stream away from the area being worked on, so as to create drier conditions for in-stream work.
- Use temporary pumping sump to control water level at site.
- Prior to the start of construction activities, such as sewer installation, inspect all erosion control measures and continually monitor them, especially after each storm event.
- If the Contractor uses dewatering methods which produce effluent discharges, the Contractor must monitor each discharge effluent and receiving water body. Discharges must not cause substantial visible contrast to the natural condition in any receiving water body. A

meter which records turbidity in standard units (i.e. NTUs) must be utilized to establish ambient conditions in each water prior to discharge. If any monitored turbidity level exceeds the ambient level of the receiving water body, the Contractor must insure (e.g., by reducing the flow rate or otherwise adjusting the dewatering system) that no substantial visible contrast to the natural condition in the receiving water body occurs. The action(s) taken, or the decision not to take any action, must be recorded in the monitors log.

The Contractor will not receive any payment for the preparation of the Erosion and Sedimentation Control Plan. Installation of the Erosion and Sedimentation features and maintenance of them will result in payment for their respective items as described in Section 7.501 through 7.517. The work must take place at the mitigation and outfall site only and is not payment for street work or the installation of sewers; with the exception of the Erosion and Sediment Control Licensed Professional (Section 7.404-B). The Erosion and Sediment Control Licensed Professional must oversee construction and the installation of the sewers for the entire project.

The work must include items of work specified under the following sections:

| <u>Title</u> |
|---|
| Maintenance of Erosion Control Measures |
| Construction Limit Fence |
| No Text |
| Straw Bales |
| No Text |
| Reinforced Silt Fence |
| No Text |
| Stabilized Construction Entrance |
| Portable Sediment Tank |
| Storm Drain – Inlet Protection Measures |
| No Text |
| |

7.501 MAINTENANCE OF EROSION CONTROL MEASURES

Maintenance/repair of the erosion and sediment control measures must be performed by the Contractor only as directed by the Engineer.

When, in the judgment of the Engineer and NYCDDC Construction Monitor, the soil erosion control measures have deteriorated to a point of not functioning adequately because of storm events, the Contractor must be notified to make the necessary repairs.

If the Engineer deems that the erosion control device was not adequately installed in the first place, repair of such a device must be the sole responsibility of the Contractor.

Damage to the erosion control measures caused by the construction activity of the Contractor is the responsibility of the Contractor. If the Engineer determines that the damage is the result of the Contractor's construction activity, then the Engineer must order that the devices are repaired. The Contractor must make the repairs at its own expense.

In the event that the erosion control measures are damaged as a result of vandalism by the general public, the Contractor must notify its insurance company and put forth a claim for remuneration to the said damage.

No separate payment will be made for this work of the specification. All costs must be included in the various Contract Items of this Contract.

* * * * *

7.502 CONSTRUCTION LIMIT FENCE

A. Description of Work

The Contractor must furnish all materials, labor, and equipment necessary to install the construction limit fence specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job. The construction limit fence is used to mark the limit of the construction activity and to protect the adjacent areas.

Prior to the start of work, Contractor must submit construction limit fence in accordance with the materials specified herein and the Contract Drawings for the approval of the Engineer. The Contractor must have written approval from the Engineer prior to installation.

Upon furnishing and installing the above sedimentation and erosion control device but prior to commencing any other work on-site, the Contractor must notify the Engineer and arrange for an on-site inspection.

The construction limit fence must be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by the Engineer.

B. Materials and Methods

<u>Construction Limit Fence:</u> The construction limit fence must be high visibility orange construction fence with a minimum height of four (4) feet. The fence must be constructed of polyethylene fabric fastened to vertical line posts.

Fabric must be a high density polyethylene grid tightly secured to wood posts. The fabric must be securely fastened to vertical line posts by means of ties and spaced not more than 12 inches apart on rails and not more than 14 inches apart on line posts.

The construction limit fence must be located where indicated on the Contract Drawings. The fence must be adjusted to avoid interference with trees and to maintain access to houses.

Line posts must be conventionalmetal "T" or "U" post and must be spaced not more than 6 feet on centers. Posts must be securely set in the ground. Line posts must extend at least 2 feet below finished grade. Post locations must be adjusted to avoid tree roots as appropriate.

C. Maintenance

The construction limit fences must be inspected periodically (at least once per week), or as directed by the Engineer. Any required repairs must be made immediately.

D. Measurement and Payment

The quantity to be measured for payment under this Section must be the total number of linear feet of construction limit fence furnished, installed and maintained in accordance with the Plans and Specifications and the directions of the Engineer.

The contract price per linear foot for Construction Limit Fence must be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.502. The unit price per linear foot must include all labor, materials, equipment and work incidental expenses necessary or required to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

* * * * *

7.503-A STRAW BALES

A. <u>Description of Work</u>

The Contractor shall furnish all materials, labor and equipment necessary to install straw bales specified herein, including all incidental and appurtenant work required for a complete job.

Upon furnishing and installing the above sedimentation and erosion control device, but prior to commencing any other work on-site, the Contractor shall notify the Department and arrange for an on-site inspection.

The straw bales shall be maintained in good condition and repaired as necessary by the Contractor during both construction and post-construction/site stabilization phases as directed by the Engineer.

B. <u>Materials and Methods</u>

All straw bales shall be of straw and shall be standard sized bales. Bales shall be placed in a single row, with ends of adjacent bales tightly abutting one another.

All bales shall be fiber-bound. No string-bound straw bales are acceptable. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales in order to prevent deterioration of the bindings.

C. Maintenance

Straw bales shall be inspected at least once per week and immediately after each rainfall of 0.5 inches or greater. Close attention shall be paid to the repair of damaged bales and end runs. Necessary repairs to barriers or replacement of bales shall be accomplished promptly. Sediment deposits should be removed after each rainfall and when the level of deposition reaches approximately one-half foot deep in front of the straw bales. Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade.

D. <u>Measurement and Payment</u>

The contract price for the straw bales must be included in the lump sum price bid under Item number 9.30 of the NYCDOT Standard Highway Specifications.

* * * * *

7.504-A REINFORCED SILT FENCE

A <u>Description of Work</u>

The Contractor shall furnish all materials, labor, and equipment necessary to construct reinforced silt fence specified herein, including all incidental and appurtenant work required for a complete job. The purpose of the silt fence is to reduce runoff velocity and effect deposition of transported sediment load.

Upon furnishing and installing the approved silt fence but prior to commencing any other work on-site, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The silt fence shall be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by the Engineer.

B. Materials and Methods

The Silt Fence shall consist of a construction (limiting) fence with filter fabric.

1. <u>Construction (Limiting) Fence:</u> The construction (limiting) fence shall be a woven wire fence with a minimum height of sixteen (16) inches. The fence shall be constructed of wire fabric fastened to the middle rails and to vertical line posts.

Wire fabric shall be of No. 14 gauge wire with a mesh of approximately 6 inches. The fabric shall be securely fastened to woven wire fence by means of ties and spaced not more than 24 inches apart on at top and mid section.

The construction (limiting) fence shall be located as indicated on the SWPPP and as directed by the Resident Engineer. The fence shall be adjusted to avoid interference with trees and to maintain access to houses.

Line posts shall be spaced not more than 10 feet on centers. Posts shall be securely set in the ground. Line posts shall extend at least 16 inches below finished grade. Post locations shall be adjusted to avoid tree roots as

appropriate.

2. <u>Filter Fabric:</u> Filter fabric shall be securely attached to the vertical line posts and wire fabric.

The filter fabric shall be purchased and delivered in a continuous roll and cut on-site to the length of the barrier(s) to avoid the use of joints. Dimensions of the roll shall be thirty-six (36) inches by one hundred (100) feet in length. When joints are necessary, filter cloth shall be spliced together only at a line post, with a minimum 6-inch overlap, and securely sealed. The filter fabric shall meet NYSDOT specifications and shall be either Filter X, Mirafi 100X, Stabilinka T140N, or approved equivalent. Prefabricated units shall be Geofab, Envirofence, or approved equivalent

Siltation fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

C. Maintenance

The reinforced silt fence shall be inspected periodically (at least once per week), or as directed by the Engineer. Any required repairs shall be made immediately.

Filter fabric shall be inspected at least once per week and immediately after each rainfall event of 0.5 inches or greater. Any required repairs shall be made immediately. Should the filter fabric decompose or become ineffective prior to the end of the expected usable life while the barrier is still necessary, the fabric shall be replaced promptly.

D. Measurement and Payment

The contract price for the silt fence must be included in the lump sum price bid under Item number 9.30 of the NYCDOT Standard Highway Specifications.

* * * * *

7.505 <u>SAND BAGS</u>

NO TEXT ON THIS PAGE

7.506 <u>SEDIMENT TRAP WITH FILTER</u>

NO TEXT ON THIS PAGE

7.507 <u>SEDIMENT FILTER</u>

NO TEXT ON THIS PAGE

7.508 <u>SEDIMENT BASIN</u>

NO TEXT ON THIS PAGE

7.509-A STABILIZED CONSTRUCTION ENTRANCE

A. <u>Description of Work</u>

The Contractor must furnish all materials, labor, and equipment necessary to construct the stabilized construction entrance specified herein and within the limits as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

Prior to the start of work, Contractor must submit stabilized construction entrance materials in accordance with the materials specified herein and the Contract Drawings for the approval of the Engineer. The Contractor must have written approval from the Engineer prior to installation.

Upon furnishing and installing the stabilized construction entrance but prior to commencing any other work on-site, the Contractor must notify the Engineer and arrange for an on-site inspection.

The entrance must be maintained in good condition and repaired as necessary by the Contractor during the construction phases as directed by the Engineer.

B. <u>Materials and Methods</u>

- 1. The entrance areas must be cleared and stripped of all vegetation, roots and other objectionable material prior to installation of the access way as specified.
- 2. Provide surface drainage and divert excess runoff to stabilized areas as required and as directed by the Engineer.
- 3. Rock use NYSDOT Size No. 3 coarse aggregate.
- 4. Thickness not less than six (6) inches for rock.
- 5. Width must be twenty-four (24) feet minimum.
- 6. Filter cloth must be placed over the entire area prior to placing of stone. Filter cloth must be as specified below.

Filter cloth underliner must be suitable for heavy duty construction traffic and have the following minimum properties:

| Grab tensile strength (ASTM D5034) | 220 lbs. |
|------------------------------------|----------|
| Elongation at failure (ASTM D5034) | 60% |
| Mullen Burst Strength (ASTM D3786) | 430lbs |
| Puncture Strength (ASTM D751) | 125 lbs. |
| Equivalent opening size | 40-80 mm |

<u>DIVISION VII – DETAILED SPECIFICATIONS</u> <u>CONTRACT SANDHWSIB</u>

Filter cloth must be TenCate Mirafi 600X, Beltech 315, TerraTexHD or approved equal.

- 7. Surface water All surface water flowing or diverted toward construction entrances must be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
- 8. Maintenance the entrance must be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- 9. When truck washing is required, it must be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- 10. Periodic inspection and needed maintenance must be provided after each rain.
- 11. After completion of the project, the stabilized construction entrance must be removed and regraded to its original condition. Prior to grading and planting, the area must be tilled to lessen the compaction of the soils.

C. Maintenance

- 1. Maintenance of the stabilized construction entrance will include periodic inspection of the surface condition. Top dress with new gravel as needed. Any areas producing sediment should be treated immediately.
- 2. After completion of the project, the stabilized construction entrance must be removed and the areas regraded to their original elevations. Prior to seeding and planting, the areas must be tilled to lessen the compaction of the soils.
- 3. For those stabilized construction entrances that are in the beds of accessways, the rock can stay in place for use in accessways.

D. Measurement and Payment

The contract price for the stabilized construction entrance must be included in the lump sum price bid under Item number 9.30 of the NYCDOT Standard Highway Specifications.

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<u>DIVISION VII – DETAILED SPECIFICATIONS</u> <u>CONTRACT SANDHWSIB</u>

7.510 <u>PORTABLE SEDIMENT TANK</u>

Portable sediment tank must conform to the requirements of the NYCDOT Standard Highway Specifications Section 9.30 Storm Water Pollution Preventions (Appendix B).

The contract price for the portable sediment tank must be included in the lump sum price bid under Item number 9.30 of the NYCDOT Standard Highway Specifications.

* * * * *

7.511 <u>STORM DRAIN - INLET PROTECTION MEASURES</u>

Storm Drain – Inlet Protection Measures must conform to the requirements of the NYCDOT Standard Highway Specifications Section 9.30 Storm Water Pollution Preventions (Appendix F).

The contract price for the inlet protection measures must be included in the lump sum price bid under Item number 9.30 of the NYCDOT Standard Highway Specifications.

* * * * *

7.512 <u>DIRTBAG</u>

NO TEXT ON THIS AGE

7.513 <u>SURFACE WATER COLLECTOR</u>

NO TEXT ON THIS PAGE

7.514 <u>TEMPORARY WATER BARRIER</u>

NO TEXT ON THIS PAGE

7.515 <u>JERSEY BARRIER</u>

NO TEXT ON THIS PAGE

7.516 <u>TURBIDITY CURTAIN</u>

NO TEXT ON THIS PAGE

PARKS - PAGES

SPECIAL PARK SPECIFICATIONS

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.

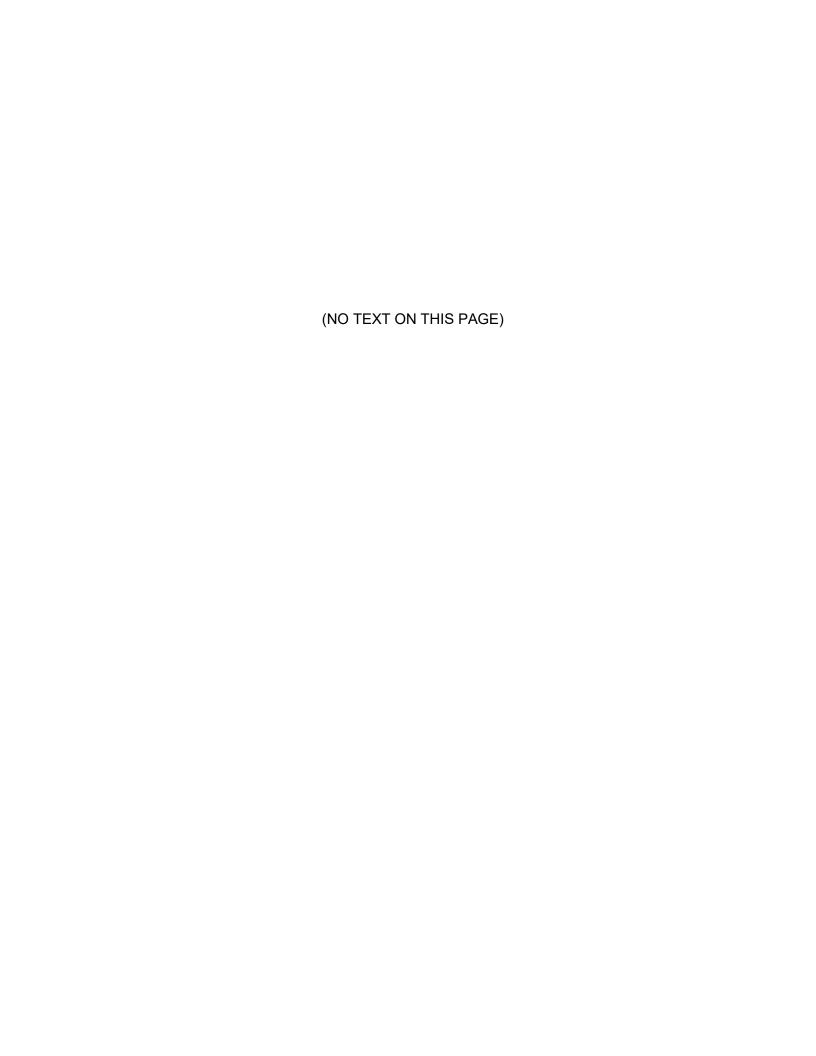


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(NO TEXT ON THIS PAGE)

SECTION PK-37 L - LOAMY SAND TO SANDY TOPSOIL

PK-37L.1 DESCRIPTION:

Under this Item, the Contractor will furnish, place, and incorporate LOAMY SAND TO SANDY TOPSOIL in accordance with the plans, specifications, and directions of the Engineer in consultation with NYC Department of Parks and Recreation Interagency Coordination (NYC Parks) at Interagency@parks.nyc.gov and the project Restoration Specialist (RS). The Contractor will be liable for any damage to property caused by topsoil operations and all areas and construction disturbed must be restored to their original condition, to the satisfaction of the Engineer.

PK-37L.2 MATERIALS:

All Topsoil material will be from a source which has been approved by the Engineer. For informational purposes only, three topsoil suppliers have agreed to maintain and protect designated stockpiles at their facility, subject to random testing and labeled "NYC Parks". Those suppliers are Long Island Compost, Yaphank, NY; Nature's Choice Corp., Jersey City, NJ; and Island Topsoil, Syosset, NY.

Alternate suppliers with topsoil inventory within one hundred fifty (150) miles of the New York City limits may be submitted for consideration, however additional time may be required to establish stockpiles and facilitate testing (see SUBMITTALS). All designated stockpiles will be tested for fertility and textural characteristics as well as environmental compliance. Only stockpiles that meet all test standards and the below specification will be approved.

All Topsoil under this item will be a friable sandy loam that has either been removed to a depth of one (1') foot (or less if subsoil is encountered) or manufactured using compost and amendments. Topsoil will be of uniform quality, free from hard clods, stiff clay, hard pan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, tarred paper, boards, chips, sticks, or any other undesirable material. No Topsoil to be delivered in a frozen or muddy condition.

Topsoil must meet the following specifications:

- 1. <u>Textural Description:</u> Must be limited to the following: Loamy sand to Sand
- 2. pH level: The acidity range must be pH 5.0 to pH 7.0 inclusive.
- 3. <u>Macro and Micronutrient Levels:</u> Must be reported by an accredited cooperative research and extension soil testing laboratory associated with a State University as approved by the Engineer. Testing inclusive of Phosphorous, Potassium, Magnesium, Calcium, Zinc, Copper, Manganese, Boron, Iron, Nitrate
- 4. <u>Soluble Salts Electrical Conductivity (EC)</u>: When tested by adding water to the soil in a 2:1 ratio, allowing salts to dissolve, then measuring the EC of the filtered watery slurry, the EC reading must be a maximum of 1.20 mmhos/cm. A higher level indicates excessive salt content and material will be rejected.

5. Organic Content:

- a. <u>Standard use:</u> Topsoil must contain a minimum of one percent (1%) organic matter determined by loss on ignition, of moisture-free samples dried in accordance with the current method of the Association of Official Agricultural Chemists. The organic matter must not exceed three (3%) percent. Should test results show organic content greater than three (3%) percent, the material will be rejected.
- b. Wetland Mitigation above MHW line use: Topsoil must contain a minimum of two percent (2%) organic matter determined by loss on ignition, of moisture-free samples dried in accordance with the current method of the Association of Official Agricultural Chemists. The organic matter must not exceed five (5%) percent. Should test results show organic content greater than five (5%) percent, the material will be rejected.
- 6. The value for Macro (P, K, N) and Micro Nutrients (Mg, Ca, Mn, Zn, Cu and B) must be as outlined below as determined by an extension soil testing laboratory associated with a State University, as approved by the Engineer, using the procedures as described in the "Soil Testing Procedures for The Northeastern United States, 2nd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, 12/95".

| Variable | Maximum Value | Minimum |
|-----------------------------|-----------------------|---------|
| Organic matter (Standard) | 3% (loss on ignition) | 1% |
| Organic matter (Mitigation) | 5% (loss on ignition) | 2% |
| pH | 7 | 3 |
| Electro Conductivity | 0.4 mmhos/cm | 0 |
| Total nitrogen (TKN) | 800 | 0 |
| Nitrate | 10 ppm | 0 |
| Potassium | 100 ppm | 0 |
| Phosphorous | 40 ppm | 0 |
| Magnesium | 150 ppm | 2 |
| Calcium | 800 ppm | 1 |

7. Mechanical Analysis: Topsoil must consist of the following percentages of gravel, sand, silt and clay. Any soil that does not meet the requirements below will be rejected. When directed by the Engineer, the Contractor may be granted permission to screen delivered topsoil at the site in order to achieve particle size compliance. Additional testing at the Contractor's expense may be required to confirm compliance after completion of on-site screening.

| Ranges: | 0-8% | Gravel | |
|--------------|--------|--------|--|
| | 70-90% | Sand | |
| | 5-15% | Silt | |
| | 5-10% | Clay | |
| OI :C (: / : | | | |

Classification/sieve size:

| 2" to 2.0 mm | Gravel |
|-------------------|--------|
| 2.0 mm to .05 mm | Sand |
| .05 mm to .002 mm | Silt |
| <.002 mm | Clay |

In addition to the above gradation the Contractor must provide the percentage of particle sizes corresponding to U.S.D.A. classifications:

 Very coarse sand
 (2.0 mm to 1.0 mm)

 Coarse sand
 (1.0 to .5 mm)

 Medium sand
 (.5 mm To .25 mm)

 Fine sand
 (.25 to .1 mm)

 Very fine sand
 (.1 to .05 mm)

 Silt
 (.05 to .002 mm)

 Clay
 (<.002mm)</td>

- 8. Recommendations: Test report must include recommendations for soil additives and/or fertilizers to correct nutrient deficiencies/ adjust pH as necessary for the specific crop(s) specified. Soil additives and fertilizers will be incorporated as recommended by the required laboratory at no additional expense to the City. Additional topsoil evaluation testing will be required to confirm compliance after application of amendments, see SUBMITTALS.
- 9. Environmental Standards: Topsoil must not exceed the analytical limits of New York State Environmental Conservation Law, New York Code Rules and Regulations, hereafter known as Title 6 NYCRR Part 375-6.8(b) Restricted Residential Soil Cleanup Objectives (SCO). Topsoil must consist exclusively of, and be limited to organic matter, soil and rock within the particle size limits listed. Plastic, cardboard, paper, metal objects, gypsum board, rubble, soil-like pulverized construction and demolition (C&D) debris, glass, concrete and concrete products, brick, asphalt and asphalt products will NOT be accepted in Topsoil.

PK-37L.3 SAMPLING AND TESTING:

The Contractor will, <u>at the earliest possible date</u>, submit the name of a supplier and an ELAP certified test laboratory (see Environmental Test Method and SUBMITTALS). The Contractor will ensure that the selected Topsoil is isolated and protected to prevent cross contamination with other Topsoil Material. The Contractor will immediately inform the Engineer of the Topsoil source selected. The Contractor is responsible for locating and isolating sufficient, acceptable Topsoil to complete the Work.

Analytical Test Method: The Contractor must ensure "Topsoil Evaluation with Soil pH and fertility recommendations for new plantings" (a.k.a. Crop Recommendations) be performed by an accredited cooperative research and extension soil testing laboratory, associated with a State University, as approved in writing by the Engineer. Testing will be performed by the Contractor at random at the Engineer's discretion. The Contractor will adhere to the soil sampling and testing guidelines of the testing laboratory. Soil testing must include: textural description, pH, macro and micronutrient levels, visual description, soluble salt level (EC), organic matter content (loss on ignition method), gravel content, mechanical analysis and required amendments and the rates of application for the required amendments. Test results and recommendations must meet the limits of this specification unless otherwise approved in writing by the Engineer. ANALYTICAL SAMPLING WILL BE PERFORMED BY THE CONTRACTOR AT THE SOURCE. The Contractor will be responsible for testing and will not be compensated for any costs associated with this work (no cost to the City).

Once Topsoil is tested and approved for the above-mentioned Analytical characteristics, the Engineer will proceed with testing for Environmental characteristics.

Environmental Test Method: Once the Contractor's proposed ELAP certified laboratory is approved, the laboratory may be directed by the Engineer to sample and test material taken from Contractor's source of Topsoil. Testing must be performed by an environmental testing laboratory certified by the NYSDOH Environmental Laboratory Accreditation Program (E.L.A.P.) and approved by the Engineer using Test Methods EPA 8260C (VOCs), EPA 8270D (SVOCs), EPA 8081B (Pesticides), EPA 8082A (PCBs) and EPA 6010C (Metals). Reference standards are those described by, but not necessarily limited to, Title 6 NYCRR Part 375-6.8(b) and the terms of this specification. Engineer will contact the Environmental Remediation Unit at_Capital-EnvRemed@parks.nyc.gov for all questions related to Environmental sampling and testing. The laboratory will send all test results directly to the Environmental Remediation Unit. Evaluation of environmental test results and acceptance or rejection of the Contractors proposed source by Park's Remediation Unit will be considered final. ENVIRONMENTAL SAMPLING WILL BE PERFORMED BY THE APPROVED LABORATORY AT THE SOURCE. The Contractor will be responsible for all fees and costs associated with soil testing work.

PK-37L.4 CONSTRUCTION DETAILS:

<u>Delivery of Topsoil</u>: Once approval is received for both analytical and environmental characteristics, the Contractor may proceed and must notify the Engineer a minimum of 48 hours prior to the intended topsoil delivery date. All imported topsoil will be delivered in trucks and may be subject to visual inspection and additional testing. For each truckload of Topsoil delivered to the site, the Contractor must provide a Bill of Lading from the source/supplier, signed by the driver and the superintendent or the Contractor's representative at the site. The Bill of Lading must indicate source, shipping time, date, quantity and delivery site. Topsoil source, shipping and receiving dates and other verifying information must match on all documents. The Bill of Lading must be in addition to, and must match, the driver's truck ticket. Topsoil will be inspected and measured in trucks upon arrival and may be sampled for comparison with previously approved Topsoil source.

<u>Preparation of Subgrade</u>: Hollows, depressions, and gullies will be filled with acceptable material free from stones over two inches (2") in diameter, cinders, rubbish, and other unsuitable material. All surplus material and debris must be removed and disposed of as directed by the Engineer.

Loosen subsoil by scarifying, ripping or tilling using disks, harrows or other suitable equipment to a depth of (4"-6") immediately before placing any topsoil. Repeat cultivation in areas where equipment used for hauling and spreading topsoil has compacted subsoil.

<u>Placement and Spreading of Topsoil</u>: No topsoil will be handled when, in the opinion of the Engineer, it is too wet. Place and spread approved topsoil in dry weather on dry unfrozen grade.

<u>Preparation of Final Grade</u>: Thoroughly cultivate topsoil to minimum depth of (5") by rototilling or hand methods where compaction has occurred and to break up all soil lumps. Float until surface is smooth.

PK-37L.5 SUBMITTALS:

<u>Proposed Samples and Test Results:</u> The Contractor will submit two (2) two pound (2 lb.) bags to the Engineer and the CMRS, with the testing report attached, for approval 30 days prior to delivering material to the site.

<u>Source:</u> The Contractor will submit the name and contact information for proposed Topsoil supplier on the Contractor's letterhead, along with specific location of stockpile, contract name, number and cubic yard quantity of each type of topsoil required under the contract (i.e. seed & sod, pits & beds). The Contractor will inform Engineer who will simultaneously e-mail source to NYC Parks and RSCM. Submittal is required a minimum of twenty-one (21) days in advance of anticipated date of Topsoil delivery to facilitate Engineer (in consultation with NYC Parks and RSCM) testing and approval. For sources of topsoil other than those listed in MATERIALS, above, or other approved Topsoil supplier list, the Contractor must submit same information a minimum of forty-five (45) days in advance.

<u>Testing Laboratory</u>: The Contractor must submit the name of a full service NYS ELAP certified commercial laboratory, certified in the category "Environmental Analyses Solid and Hazardous Waste" for approval by the Engineer. See website http://www.wadsworth.org/labcert/elap/comm.html for a list of NYSDOH certified labs. The laboratory must make themselves available to sample at the proposed topsoil source. The Engineer reserves the right to request a certificate of laboratory approval issued and signed by NYSDOH. Laboratories with expired certificates will not be approved. The approved laboratory will send all test results to Engineer, who will distribute to NYC Parks and RSCM.

<u>Amendments:</u> The Contractor will submit cut sheets for all required field added commercial fertilizers and amendments in accordance with laboratory Topsoil evaluation recommendations immediately after test results are received.

<u>Test Reports:</u> Completed test reports will be provided to the Engineer to confirm that amendments have been incorporated in the field. The Contractor will supply one (1) Landscape Evaluation laboratory test report, (as described under Analytical Test Method) for every one hundred (100 cy) cubic yards of topsoil installed (one minimum), provided to the Engineer for its use at no additional cost to the Agency. The quantity of test reports required will be based on a combined quantity of topsoil for both planting pits & beds and seeded and sodded areas.

PK-37L.6 APPEAL PROCESS: The Engineer will visually check for discrepancies between the delivered soil and the approved submittal and sample. If the Engineer suspects that the topsoil delivered to the site has excessively high levels of organic matter, pH, clay, etc. that would not be within the allowable levels listed in this specification, the soil will be rejected until additional testing proves otherwise. Should the Contractor contest the Engineer's determination, Engineer will take samples so additional tests may be performed at the Contractor's expense. Testing must be performed by an accredited cooperative research and extension soil testing laboratory associated with a State University as approved by the Engineer as approved in writing by the Engineer. The Contractor will make application and send samples for additional testing. These results will be considered final.

PK-37L.7 METHODS OF MEASUREMENT AND PAYMENT: The quantity of **LOAMY SAND TO SANDY TOPSOIL** to be paid for under this Item will be the number of **CUBIC YARDS** of topsoil furnished, placed, and incorporated in the completed work in accordance with the plans, specifications, insurance, and the directions of the Engineer. No topsoil will be furnished until ordered by the Engineer.

The price bid will be a unit price per **CUBIC YARD** of topsoil measured in trucks used for delivery, and will include the cost of all labor, materials, and equipment necessary to prepare topsoil areas, soil testing, furnish, place, and incorporate topsoil and all other work incidental thereto, to the satisfaction of the Engineer.

Item 6.02 AAN Unclassified Excavation and Item 70.81 CB Clean Backfill will be paid under their respective items.

*Delivery ticket with name and address of vendor, date, and estimated volume must be supplied to the Engineer prior to truck measurement.

Payment will be made under:

| Item No. | Description | Pay Unit |
|----------|-----------------------------|----------|
| PK-37 L | LOAMY SAND TO SANDY TOPSOIL | C.Y. |

SECTION PK-465 A BROADCAST SEEDING OF NATIVE SEED & COVER CROP

PK-465 A.1 DESCRIPTION: Under this item of the contract the Contractor will do all work necessary for the BROADCAST SEEDING OF NATIVE SEED & COVER CROP in accordance with the plans, specifications, and directions of the Engineer in consultation with the project Restoration Specialist - Construction Monitor (RSCM) and NYC Department of Parks and Recreation Interagency Coordination (NYC Parks) at Interagency@parks.nyc.gov. Purchase of cover crop and native seed, site soil preparation, broadcast seeding of cover crop seed and native seed, mulching, watering, maintaining and reseeding of cover crop and native seed, as needed, and all incidental work will be completed under this item. All work must be in accordance with the plans and specifications to the satisfaction of the Engineer (in consultation with RSCM and NYC Parks).

PK-465 A.2 GENERAL REQUIREMENTS: Seed will be broadcast where indicated on the plans unless written approval is obtained from the Engineer. Any seed broadcast in a location not on the contract list and without the knowledge of the Engineer will not be approved for payment.

The Contractor will be liable for any damage to property caused by broadcast seeding operations and related work and all areas and construction disturbed must be restored to their original conditions to the satisfaction of the Engineer, within three (3) days of occurrence.

PK-465 A.3 MATERIALS:

(A) NATIVE SEED: All native seed is seed of indigenous species, which must be derived from a minimum of five (5) wild populations per species, each originating from within the five (5) boroughs of NYC. Seed collected from each wild population must be sampled randomly from a minimum of fifty (50) individuals in each population. Native seed is not a released selection, cultivar or named variety.

The Contractor must purchase the "Native Seed" from a seed material supplier approved by the Engineer (in consultation with NYC Parks) and the cost will be included in the bid price for this item. The Native Seed bag must be unopened and a copy of the label must be submitted as part of the Seeding Plan (see "CONTRACTOR'S SEEDING PLAN" section below) for approval by the Engineer (in consultation with NYC Parks), before seeding commences (see Section PK-465 A.7 Submittals below).

Detailed documentation of seed provenance for each seed lot must be submitted within 30 (30) days of award of contract. Documentation must include the following information: species, date of collection, location/address, GPS coordinates, population estimate, sample size, community & habitat type, land use, soil texture, seed quality assessment and associated species (see Section PK-465 A.7 Submittals below).

The bulk quantity of the seed for mixes to be purchased will be determined as detailed under "Quality and Inspection" in this specification to meet the required seeding rate of 30 lbs Pure Live Seed (PLS) per acre. The composition and Pure Live Seed application rates of each species in the seed mix will be as follows:

Upland Mix:

| <u>a mix.</u> | |
|------------------------|------------------|
| Tridens flavus | 4.8 lbs PLS/acre |
| Sorghastrum nutans | 4.8 lbs PLS/acre |
| Panicum virgatum | 4.8 lbs PLS/acre |
| Andropogon virginicus | 4.8 lbs PLS/acre |
| Euthamia graminifolia | 2.7 lbs PLS/acre |
| Solidago rugosa | 2.0 lbs PLS/acre |
| Sym.novae-angliae | 1.1 lbs PLS/acre |
| Asclepias incarnata | 0.9 lbs PLS/acre |
| Eupatorium fistulosum | 0.9 lbs PLS/acre |
| Solidago juncea | 0.8 lbs PLS/acre |
| Solidago nemoralis | 0.8 lbs PLS/acre |
| Symphyotrichum laeve | 0.8 lbs PLS/acre |
| Symphyotrichum pilosus | 0.8 lbs PLS/acre |
| | |

Wetland Mix:

Maritime Mix:

| IIC WIIX. | |
|-----------------------------|------------------|
| Sorghastrum nutans | 7.5 lbs PLS/acre |
| Andropogon virginicus | 6.2 lbs PLS/acre |
| Schizachyrium scoparium | 6.2 lbs PLS/acre |
| Panicum virgatum | 4.8 lbs PLS/acre |
| Asclepias syriaca | 0.9 lbs PLS/acre |
| Solidago sempervirens | 0.9 lbs PLS/acre |
| Apocynum cannabimum | 0.8 lbs PLS/acre |
| Symphyotrichum novae-anglia | 0.6 lbs PLS/acre |
| Monarda fistulosa | 0.5 lbs PLS/acre |
| Oenothera biennis | 0.5 lbs PLS/acre |
| Sollidago rugosa | 0.4 lbs PLS/acre |
| Eupatorium hysspoifolium | 0.3 lbs PLS/acre |
| Euthamia graminifolia | 0.2 lbs PLS/acre |
| Juncus greenei | 0.1 lbs PLS/acre |
| Pseudognaphiliy obtusfolium | 0.1 lbs PLS/acre |

(B) COVER CROP: "Cover Crop" is seed of an indigenous species used to prevent erosion and improve soil quality. The Contractor will purchase the following two species for use as cover crop: *Elymus virginicus* (*Virginia wild rye*) and *Chamaecrista fasciculata* (*partridge pea*). These species will not be a released selection, cultivar or named variety.

The Contractor must purchase the cover crop from a seed material supplier approved by the Engineer and the cost will be included in the bid price for this item. The cover crop bag must be unopened and a copy of the label must be submitted as part of the Seeding Plan (see "CONTRACTOR'S SEEDING PLAN" section below) for approval by the Engineer (in consultation with RSCM and NYC Parks), before seeding commences (see Section PK-465 A.7 Submittals below).

(C) MULCH: Mulch will be straw mulch stalks of oat or wheat, or wood pulp mulch as approved by the Engineer. Mulch will only be installed in areas designated by Engineer. All mulch must be free from noxious weeds and other material and contain no fertile seed. Straw mulch, if used, will be well cured to less than twenty (20%) percent moisture by weight and furnished in airdry condition and can be installed with commercial mulch blowing equipment.

Four (4) weeks prior to intended commencement of any seeding operations, the Contractor must submit a representative sample (i.e.- two (2) one (1 lb.) pound zip-lock bags labeled with Contractor's name and contract number on each bag in permanent ink) of the straw mulch proposed for use to the Engineer for approval (See Section PK-465 A.7 Submittals below). No straw mulch will be delivered to the seeding site until the approval of samples by the Engineer, but such approval will not constitute notice of substantial completion. The Engineer reserves the right to reject on or after delivery any straw mulch or ANY MATERIALS which do not meet these specifications to the Engineer's and NYC Parks satisfaction.

- **(D) BROADCAST SEEDING EQUIPMENT:** Seeding will be performed using hydraulic, cyclone, knapsack hand-operated or other broadcast type seeders. The choice of broadcasting equipment will be scaled to the area to be seeded to maximize efficiency of operations. The Contractor must submit the broadcast seeding equipment specifications as part of the Seeding Plan six (6) weeks prior to the intended commencement of seeding operations for approval by the Engineer (see Contractor's Seeding Plan and Submittals Sections PK-465 A.4.(A) and PK-465 A.7.2 below).
- **(F) JUTE MESH SEEDING EROSION CONTROL:** New Jute Mesh: Specification ITEM NO.8.20 JUTE MESH. Jute Mesh will be installed per specification at all areas intended for seeding, unless directed otherwise by Engineer (in consultation with RSCM and NYC Parks).

PK-465 A.4 CONSTRUCTION DETAILS:

QUALITY AND QUANTITY:

Seed must be fully cleaned, in the original, unopened bags and with an informational label permanently affixed to each bag. Damaged or faulty bags will be rejected. All seed must **NOT** be of a released selection, cultivar or named variety. All seed must be free of noxious weeds and undesirable grasses. Seed must have less than one (1%) percent of other crop seed. Seed must be properly stored by the Contractor in a cool, dry area free of rodents until needed by the Contractor.

All seed will be bagged and labeled with the following information:

• Species name/Common name

- Origin
- Net weight
- Percent Pure Seed (Purity)
- Percent weed seeds
- Percent other crop seeds
- Percent inert matter
- Percent germination
- Percent dormant seed
- Germination test date
- Seeds/Pound

The information contained on the label must be derived from an official seed analysis laboratory report from an accredited seed testing laboratory. A copy of the official seed analysis laboratory report must be submitted to the Engineer for each species constituting the mix prior to the purchase of seed by the Contractor. Copies of all seed analysis reports will be submitted by the Contractor as part of their Seeding Plan, no later than six (6) weeks prior to the date when the Contractor intends to commence seeding operations (see Contractor's Seeding Plan Section PK-465 A.7 Submittals below).

The Contractor must submit the below calculations as part of their Seeding Plan for review and approval by the Engineer (in consultation with NYC Parks) prior to placing an order for the native seed with the seed supplier. The Contractor will have the seed mixed by the vendor only after the Contractor's broadcast seeder equipment specifications and the below Calculations have been submitted as part of the Seeding Plan AND approved by the Engineer (see "Contractor's Seeding Plan" and Submittals Sections PK-465 A.4.(A) and PK-465 A.7.2 below).

Percent germination, percent dormant seed, and percent purity (sometimes called percent pure seed) results from the above official seed analysis laboratory report are necessary to determine a current Percent Pure Live Seed (%PLS) value for each species. Test results must be from within the last twelve months.

1. <u>Percent viability</u>: Percent viability in this calculation will be determined from the test results by adding the percent germination value and the percent dormant seed value:

Percent viability = Percent germination + Percent dormant seed NOTE: If a percent dormant seed value is not provided in the test results, use the percent germination value alone as the percent viability in the following PLS calculation.

2. <u>Percent of Pure Live Seed</u> (%PLS) is the product of the percent (%) purity (from the test results) multiplied by the percent (%) viability (from calculation #1), divided by 100.

%PLS= (% purity x % viability)/100 NOTE: %PLS values must be calculated for each species individually.

3. <u>Bulk seeding rates</u> for each species are to be determined by dividing the PLS/acre seeding rate provided above for each species by the %PLS of each seed lot (from calculation #2 above).

Bulk Seeding Rate for each species = Pounds PLS (species) per acre / %PLS NOTE: The bulk seeding rate must be calculated for each species individually prior to blending the seed mix and sowing.

PK-465 A.4 CONSTRUCTION DETAILS:

- (A) CONTRACTOR'S SEEDING PLAN: A Seeding Plan MUST be submitted at least six (6) weeks prior to seed broadcast seeding commencement. No soil preparation for seed broadcasting operations as per the below "Site Preparation" Specification Section PK-465 A.4.(C) of this specification will commence until the Seeding Plan has been received and approved IN WRITING by the Engineer. The Seeding Plan must include the following:
 - Broadcast seeder's specifications for approval
 - Calculations as per above "Quality and Inspection" section.
 - The setting that will be used on the broadcast seeder based on the bulk seeding rate for each species to deliver the correct amount of seed to the site.
 - A copy of the label from the purchased cover crop bag(s).
 - The approved time-frame for seed installation.

Upon approval of the type of seeder and the Seeding Plan by the Engineer, the Contractor will instruct the supplier to mix the seed per the approved Seeding Plan.

(B) NATIVE SEED AND COVER CROP STORAGE AND DELIVERY TO SITE:

The Contractor must securely store the purchased seed away from vermin (including rodents), moisture and excessive heat or cold. The Engineer reserves the right to inspect the Contractor seed storage area and any seed found improperly stored as determined by the Engineer or their designated representative or infested by vermin or insects will be rejected. Rejected seed must be replaced at the Contractor's expense. The cost of replacement seed will be borne solely by the Contractor. Replacement seed must meet all the same specifications as the original purchased seed.

Seed will be rejected by the if seed delivered to the site is in an unacceptable condition such as open, damaged or wet bags, or if bags are damaged on site by improper handling or storage. All rejected material must be marked by the Engineer and will be replaced with acceptable material at the Contractor's expense. There will be no additional cost to the City.

(C) SITE PREPARATION:

<u>Site Acceptance</u>: Sites where the Contractor has performed invasive species removals under this contract must be inspected by the Engineer with the Contractor and approved for seeding PRIOR TO soil preparation for seeding operations. Sites where invasives have not been properly controlled as per the Engineer will not be accepted for seeding. As directed by the Engineer, such sites must be re-treated at no additional cost to the City.

Any site where the Contractor has not performed invasive species removal under this contract must be inspected together by the Engineer (in consultation with RSCM and NYC Parks) and the Contractor and approved prior to seeding. Performance of initial broadcast seeding by the Contractor at any such site where the Contractor did not perform invasive removals constitutes acceptance of all the terms of this specification for the site.

<u>Soil Preparation</u>: If required and at the direction of the Engineer, or their designated representative, the Contractor will be mow all vegetation to a height of no more than two (2") inches across the entire the area to be seeded. Mowing, if directed by Engineer in preparation for tilling or decompaction, will be included in the cost of seeding without regard to prior invasive species treatment actions.

Prior to seeding, the area will be tilled or disced to loosen the top four (4") inches of soil. The tilled or disced area will be fine-tilled or power-raked to open the soil and remove rocks, roots, top growth, or debris over two (2") inches in size, in any dimension. The chain method or another suitable and pre-approved method of cultivation will be employed to loosen, rough grade, and prepare the seedbed.

After seed bed preparation, areas to be seeded will be "tracked" with tracked crawler or rubber-tired equipment to make depressions to receive the seed.

THE DISCED AND TRACKED AREA MUST BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO SEEDING.

(D) INSTALLATION: No broadcast seeding will be done except in the presence of the Engineer (in consultation with RSCM and NYC Parks). Any broadcast seeding performed in a location not on the contract list and without the knowledge of the Engineer or their designated representative will not be approved for payment.

The Engineer must be notified in writing not less than five (5) working days in advance before any broadcast seeding is to commence. Seed must be sown in the spring during the months of March, April, or May or in September, or October or as directed by the Engineer.

<u>Seeding Plan</u>: A seeding plan must be submitted at least six (6) weeks prior to broadcast seeding commencement. No Site Preparation as per the above PK-465 A.4.(C) "Site Preparation" specification Section of this specification will commence until the Seeding Plan has been received and approved in writing by the Engineer. See PK-465 A.4.(A) "Contractor's Seeding Plan" specification Section above and PK-465 A.7 Submittals specification Section below for details.

<u>Timing of Seeding Operations</u>: In order to minimize invasive species regeneration on site, the Contractor will time the seeding application to coincide with completion of the Invasive Removal Items of this contract and as directed by the Engineer. See specification Section PK-465 B.4.(C)"Site Preparation" above. The time-frame for installation will be included in the Seeding Plan.

<u>Seeding Methods & Requirements</u>: Seed method will be broadcast seeding. Seeding will be performed using hydraulic, cyclone, knapsack hand-operated or other broadcast type seeders. The choice of broadcasting equipment will be scaled to the area to be seeded to maximize efficiency of operations and must be approved by the Engineer.

Six (6) weeks prior to the commencement of seeding operations, the Contractor must submit to the Engineer for approval their Seeding Plan for applying the seed, including the specifications for the broadcast seeder. Upon approval of the seeder and the Seeding Plan by the Engineer, the Contractor will instruct the supplier to mix the seed per the approved Seeding Plan Calculations (See specification Section PK-465 A.4.(A) "Contractor's Seeding Plan above and specification Section PK-465 A.7 Submittal's below).

All seeding must be performed in moderately dry to moist soil conditions at a time when the wind velocity does not exceed five miles per hour (5 mph) as directed by the Engineer or their designated representative. The Engineer can direct the Contractor to postpone seeding until soil moisture and wind velocity conditions are acceptable as per the Engineer.

Particular care must be exercised to ensure that the application is made uniformly and at the prescribed rate, guarding against missed areas and overlaps. Sow one-half the seed in one

direction, and sow remainder at right angles to the first sowing. The contractor will cover seed uniformly to a maximum depth of one-half (1/2) inch by means of spike-tooth harrow, cultipacker, rake or other approved devices.

<u>Cover Crop</u>: The Contractor will purchase two species for use as cover crop: Chamaecrista fasciculata (Partridge Pea) and **Secale cereale** (Common Rye). The Contractor will broadcast the cover crop seed at the same time as the native seed. Cover crop seeding operations must only be staged during any of the following months. If seeding operations take place in the months of March, April or May, the Contractor will apply a mixture of Chamaecrista fasciculata (Partridge Peas) at a rate of fifteen (15 lbs. /acre) pounds per acre and Secale cereale (Common Rye) at a rate of fifteen (15 lbs. /acre) pounds per acre). If seeding operations take place in the months of September or October, the Contractor will apply Secale cereale (Common Rye) at a rate of twenty (20 lbs. /acre).

<u>Native Seed</u>: Dry seed will be uniformly broadcast at the application rate of thirty (30 lbs) PLS/acre (pounds Pure Live Seed per acre). The Contractor will install seed at the bulk seeding rate as calculated and accepted by the Engineer in the Contractor's submitted Seeding Plan (see PK-465 A.4.(A) "Contractor's Seeding Plan" specification Section above and PK-465 A.7 Submittals specification Section below).

Straw Mulch: The Contractor will furnish and place straw mulch in accordance with the plans, specifications and as per the Engineer. All mulching will be done concurrent with or immediately following seeding operations. Straw mulch will be spread uniformly at the rate of one point five (1.5) tons in net dry weight per acre. Mulch will be spread by hand, blower-type mulch spreader or other approved method only. Equipment will NOT be allowed that does not properly distribute the weight of the equipment over a large area. Mulching must be started on the windward side of relatively flat areas or on the upper part of steep slopes and continued uniformly until the area is covered. The mulch will not be bunched or clumped and should not exceed fifty (50%) percent ground cover.

Tackifier: No tackifier will be used unless otherwise directed by the Engineer.

<u>Jute Mesh</u>: Jute Mesh will be applied in areas determined by Contractor, and approved by the Engineer (in consultation with RSCM and NYC Parks). Jute Mesh will be applied as a ground cover to the surface of all seeded areas after the seeding is completed. Jute Mesh will be applied to a uniform depth and will be so distributed as to create a smooth, level cover.

The Jute Mesh will be installed as described in Specification Section 8.20 JUTE MESH and be paid for under separate payment.

Watering At Installation: At the discretion of the Engineer, the Contractor will water the site exactly four (4) days after completion of seeding if there is only a trace of rain or less as determined by the Engineer within three (3) days of completion of seeding operations. The Contractor must have a portable, truck-mounted and pump-driven hydraulic watering system, with proper nozzles to ensure gentle watering of the seeded area and with a tank size sufficient to water the entire seeded area at 6,000 gallons per acre (1/4-inch) or the ability to refill the tank as approved by the Engineer (see below regarding City hydrants). The water truck must be preapproved by the Engineer. No hand watering will be permitted. If necessary, for areas not accessible to water from a truck-mounted tank, a watering irrigation system MUST be installed with proper nozzles to insure gentle watering of the seeded area.

Where water is supplied from City hydrants, the Contractor must obtain a hydrant permit from the Department of Environmental Protection. The Contractor is responsible for keeping the permits current.

The Contractor must have all tools necessary for using city hydrants in their possession at time of seeding to ensure that this specification is adhered to. If conditions do not allow the use of New York City water sources, the Contractor must obtain their own source of water. No direct payment will be made for water obtained from other than city sources, but the cost thereof will be deemed included in the bid price of this item and other various items of the contract.

PK-465 A.5 EVALUATION & INSPECTION: The first inspection will occur one to two (1-2 mos.) months after broadcast seeding has been completed. The cover crop only will be inspected at this time. At the time of inspection, if the cover crop is found to provide less than sixty (60%) percent cover, at the discretion of the Engineer the Contractor must re-seed using half the original seeding rate (see Cover Crop in "Installation" Specification Section PK-465 A.4.(D) above) in the next month of the approved seeding months of March, April, May, September or October.

The second inspection will occur during the months of June or July one (1) cold season (Nov 1st - March 1st) after broadcast seeding has been completed. Therefore, the second inspection will always occur in June or July of the FOLLOWING YEAR after seed installation regardless of the month seed installation occurred. Both cover crop and native seed must be inspected and acceptance is to be provided for areas in which approved growth is achieved as determined by the Engineer. If inadequate growth as determined by the Engineer is observed in the area seeded, the Contractor will re-seed at half the original seeding rate in the months of March, April, May, September or October. Any additional native seed required must be purchased by the Contractor and meet the specifications under the "Native Seed" paragraph of the "Materials & Equipment" section of this specification. Additional cover crop seed must be purchased as described in the "Materials & Equipment" section (See Section PK-465 A.3).

Additional inspections will be held until the end of the guarantee period. If inadequate growth as determined by the Engineer is observed in the area seeded, the Contractor will re-seed at half the original seeding rate in the months of March, April, May, September or October. Any additional native seed required must be purchased by the Contractor and meet the specifications under the "Native Seed" paragraph of the "Materials & Equipment" Specification Section PK-465 A.3.(A) above. Additional "Cover Crop" seed must be purchased as described in "Materials & Equipment" Specification Section PK-465 A.3.(B) above.

PK-465 A.6 MAINTENANCE: The Contractor will perform seed installation, watering, and mowing required to achieve good growth and establishment of the cover crop and native seed.

(A) Re-seeding: After inspection, the Contractor must reseed any areas which fail to show growth satisfactory to the Engineer (in consultation with RSCM and NYC Parks) and as directed by the Engineer with the specified mixture of seed as many times as is necessary, but not to exceed twice per year in any one location, until notice of substantial completion of the Contract. Minimum even distribution of eighty-five (85%) percent germination/cover for satisfactory successful growth. Reseeding will be at no additional cost to the City and will be included in the Contractor's bid price for this item. Any additional native seed required must be purchased_by the Contractor and meet the specifications under the "Native Seed" paragraph of the "Materials & Equipment" Specification Section PK-465 A.3.(A) above. Additional cover crop seed must be purchased as described in the "Materials & Equipment" Specification Section PK-465 A.3.(B) above.

There will be a two (2) year guarantee on the seeded area commencing after the final acceptance and the completion of the whole work of this contract. After substantial completion, the seeded area must be inspected periodically during the guarantee period by the Engineer and when instructed by the Engineer, the Contractor must reseed any area failing to show growth satisfactory to the Engineer and NYC Parks in the next appropriate month even when the next month falls outside the two (2) year period. This reseeding will occur as many times as necessary but not to exceed twice per year in any one location throughout the two (2) year guarantee period. Reseeding as part of the two-year guarantee will be at no additional cost to the City and will be included in the Contractor's bid price for this item and no additional cost to the City.

- (B) Watering: Water must be free from oil, have a pH not less than six (6.0) nor greater than eight (8.0) and must be free from impurities injurious to vegetation. Watering will take place until final acceptance of the contract AND throughout the two-year guarantee period following substantial completion of the contract and will be at a rate of at least six thousand (6,000) gallons per seeded acre at a MINIMUM of two (2) week intervals from May 1st to December 1st unless otherwise directed by the Engineer. The Engineer can order more or less watering based on weather conditions, resulting soil water content or other factors. If drought conditions warrant, the Engineer can order more frequent watering than scheduled or during non-scheduled periods. A biweekly watering schedule must be submitted to the Engineer prior to May 1st or upon completion of the seeding operations if after May 1st (see Specification Section PK-465 A.7 Submittals below). See Specification Section PK-465 A.4 "Watering At Installation" above for information about water supplied by NYC hydrants.
- **(C) Mowing:** The seeded site will be mowed one time after the completion of seeding during the months of July and August when after native vegetation has gone to seed. Vegetation will be mowed to a height of six to eight (6-8") inches to increase resource allocation for the native seedlings and prevent weeds from producing seed.

<u>PK-465 A.7 SUBMITTALS</u>: Submittals will be as follows (specific submittal requirements described in this specification):

- 1. <u>SEED PROVENANCE AND QUALITY:</u> Contractor must submit documentation verifying the provenance and quality of each species (6) weeks prior to broadcast seeding commencement. Documentation will include the following information:
 - a. Species
 - b. Date of collection
 - c. Location/address of collection
 - d. Seed quality assessment, including percent viability and percent live seed
- 2. <u>SEEDING PLAN:</u> At least six (6) weeks prior to broadcast seeding commencement, the Contractor must submit a seeding plan that will include the following:
 - a. Broadcast seeder's specifications for approval
 - b. Calculations as per above "Evaluation and Inspection" Specification Section PK-465 A.5.
 - c. The setting that will be used on the broadcast seeder based on the bulk seeding rate for each species to deliver the correct amount of seed to the site.
 - d. A copy of the label from the purchased cover crop bag(s).
 - e. The approved time-frame for seed installation.
- 3. MULCH: At least four (4) weeks prior to intended start of seeding operations, the

Contractor will submit a representative sample (i.e.- two (2) one (1 lb.) pound zip-lock bags labeled with the Contractor's name and contract number on each bag in permanent ink) of the straw mulch proposed for use to the Engineer for approval. No straw mulch will be delivered to the seeding site until the approval of samples by the Engineer, but such approval will not constitute notice of substantial completion. The Engineer reserves the right to reject on or after delivery straw mulch or ANY MATERIALS which do not meet these specifications to the Engineer's satisfaction.

PK-465 A.8 MEASUREMENTS AND PAYMENTS:

The quantity of BROADCAST SEEDING OF NATIVE SEED & COVER CROP to be paid for under this Item will be the area seeded, measured in SQUARE YARDS, in accordance with the plans, specifications, and directions of the Engineer or their designated representative.

The price bid will be a unit price per SQUARE YARD of area broadcast seeded and will include purchase of cover crop and native seed, all site and soil preparation, broadcast seeding, mulching, watering, replacing all seed and reseeding, mowing of the seeded area, insurance and all other work incidental thereto, in accordance with the plans and specifications, to the satisfaction of the Engineer. The price of water, regardless of the source, will be included in the bid price. No extra payment will be made for water obtained from the Contractor's own source.

Approved payments are dependent on adherence to the approved watering and maintenance schedule.

Payment will be made under:

Item No. Description Pay Unit

PK-465 A BROADCAST SEEDING OF NATIVE SEED & COVER CROP S.Y.

EP7 (1.0) - PAGES GAS COST SHARING (EP-7) **STANDARD SPECIFICATIONS**

NOTICE

THE PAGES CONTAINED IN THIS SECTION REPRESENT THE GAS COST SHARING WORK THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

(NO TEXT ON THIS PAGE)

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I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

All prospective bidders are hereby advised that, pursuant to the "Gas Facility Cost Allocation Act", ("the Act"), the City of New York has entered into an agreement ("the Agreement") with the gas companies (Con Edison or National Grid (formerly KeySpan Energy Delivery)) operating in their respective areas of the City to "share" the cost of facility relocation and/or support and protection of facilities disturbed by proposed water and/or sewer and related City work specified in this contract. Therefore, bid items, specifications and estimated quantities for the incremental costs of support and protection of certain gas facilities have been included in this contract. The low bid for this contract shall be determined by examining each bid for all work to be performed under this contract including any work of support and protection of gas facilities to be performed. The Contractor shall not seek additional compensation from gas companies except as specifically set forth in its contract.

II - GENERAL PROVISIONS: GAS COST SHARING WORK

1. General:

The Contractor shall perform City work with interferences from existing live and abandoned gas facilities. This shall be defined as utility work. Therefore this contract includes bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, providing accommodations and, avoiding disturbing gas facilities located in the streets shown on the contract drawings. In the event that any other provisions of this contract related to gas facilities (or private utilities) conflict with these provisions, these provisions shall supersede and govern all work related to gas facilities owned by the companies operating in the project area. All utility work, as defined in these specifications, including changes and additions thereto shall be paid solely by the City except when specified otherwise in this contract. Contractor hereby agrees that the facility operator shall not be liable to pay him/her for any work performed including extra utility work. Contractor agrees that its bid prices include all compensation for 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, lost of profit, other damages or impact costs that may be suffered by or because of utility work, or the presence of gas facilities in the proximity of City work and that it will not seek additional compensation for these items. All disputes shall be resolved as specified in the contract.

Pursuant to the Act, Agreement, and the New York City Administrative Code, the gas company(ies) has been directed by the Commissioner and is required to perform all maintenance, repairs, replacement, shifting, alteration, relocation, and/or removal work that are not part of this contract. By having bid on this contract, the Contractor understands and agrees that the Commissioner has preasserted any right the City has to require, including the issuance of any directives or so called "order outs" under the New York City Administrative Code, any or all gas companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove all gas facilities that are about to be disturbed by the City contract work. The issuance of additional such directives during the performance of the contract work, where necessary in the sole judgment of the Commissioner, shall be initiated by such Commissioner as set forth in the relevant sections of the Act and Agreement. Contractor further agrees to insert such requirements as set forth herein above into any contracts with its approved subcontractors so that its subcontractors also understand and agree to such contract requirements.

2. Gas Interferences And Accommodations:

During the performance of sewer and water main work funded by the New York City Department of Environmental Protection (NYCDEP), as instructed by the Engineer, the use of any applicable contract bid item is allowed in order to resolve and accommodate all gas facilities interferences with such City work, including the removal of contaminated soil in associated trench excavation. This is in addition to the specified EP-7 bid items in the contract. Payment for such accommodation shall be funded by EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" (F.S. Fixed Sum). The value of such accommodation shall be computed by multiplying the appropriate unit prices bid to the quantity of work performed, as determined by the Engineer, and applying the total amount thus to be paid

to EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>". When EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>" does not exist, such additional accommodation work shall be at no cost to the City but shall be a matter of adjustment between gas facility operator and Contractor. Private facilities, other than gas, that become in interference due to gas interferences accommodations shall also be accommodated, if so directed by the Resident Engineer, at no additional cost to the City and, provided that its owner agrees to be responsible for all additional costs to Contractor, otherwise, such facility shall be ordered by the City to be maintained, shifted, relocated or replaced by its owner at his/her expenses.

2a. Water Main Accommodations:

When water main construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the vertical or horizontal alignment of water mains including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and laying offset fittings and pipes, etc., necessary in order to complete water main installation and, avoid gas interferences in the project area, including street intersections. Typical work method accommodations shall include, but not be limited to, pier and plate, installation of filter fabric and select fill, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of water mains standards and specifications.

2b.Sewer Accommodations:

When sewer construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the horizontal alignment of sewer facilities (if possible) including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and construction of additional manholes or modification of manholes/catch basins, extending chute connections, house connections, using alternate materials and methods, poured-in-place structures, etc., necessary in order to complete sewer installation and, avoid gas interferences in the project area, including street intersections. The term sewer facility shall include, but not be limited to, all sewer pipe and appurtenances, manholes, catch basins, catch basin chutes, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of sewer standards and specifications.

3. Quantity Overruns, EP-7 Funded Bid Items:

No quantity overrun, in excess of one hundred twenty five (125) percent, shall be permitted for EP-7 funded bid items (gas) included in this contract, except when Resident Engineer determines that such overruns are caused by field modifications to planned City work, or approved construction methods, or contract scope changes. The Engineer will notify the gas facility operator in writing of overruns. The Contractor must invoice the gas facility operator for payment of all overruns, which will be paid by the gas facility operator at the contract bid price. Gas facility operator will be entitled to reimbursement by NYCDEP under established cost sharing procedures.

4. Changes And Extra Work:

This section is not applicable to work defined under "Emergency Reconstruction Contracts" or so-called "Where and When Contracts" since these projects, by definition, inherently encounter unanticipated gas facilities and cannot be pre-engineered. In all other cases, any contract changes proposed for City work shall also cover and include all associated changes to support and protection of gas facilities affected by such changes to City work. In all other cases where the Contractor finds that City work cannot be performed as planned and specified and/or, as approved because of a need to support, protect and/or alleviate interferences from gas facilities that were not listed and/or shown, or incorrectly shown in contract plans and specifications, he shall immediately notify the Resident Engineer and the facility operators' representative of his findings. Resident Engineer shall promptly examine such claims and determine whether or not such work is covered by contract bid items and /or specifications (contract bid items and specifications shall include city contract items as well as EP-7 items). The Resident Engineer shall also

examine the claim to determine if the application of EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" is appropriate to resolve the claim. If upon examination, the Engineer determines that such field conditions were unanticipated (not shown and/or listed, or incorrectly shown in contract documents) and are not covered by bid items and contract specifications, he shall then direct the Contractor and the affected facility operator to negotiate the cost of supporting and protecting, and/or alleviating the impact on City work caused by such unanticipated gas facilities with each other with the understanding that the performance of City work shall continue during negotiations. If a cost agreement is reached, the Contractor and facility operator shall adjust such costs between themselves at no additional costs to the City contract. If the Contractor and affected facility operator do not reach an agreement concerning the price to be paid for the extra work within five (5) business days of the Engineer's directive to engage into such negotiations and, after considering public safety and inconvenience, requirements of laws and regulations applicable to private utilities, integrity of all utility systems, including but not limited to sewer and water, gas, electric, telephone and, cable TV facilities, sound engineering practices, cost (long and short term) to all affected parties, and potential City work delays, then the Resident Engineer, depending on nature and severity of interferences with City work, shall either, direct the facility operator to relocate or replace its facilities at its own discretion and cost, reimbursable by NYCDEP under established gas cost sharing procedures or, direct the Contractor to perform the utility work on actual time, material and equipment costs basis pursuant to relevant contract requirements and amendments. Contract bid prices for any applicable items of work involved shall be applied, or converted to an allowance for time and material charges. Changes shall be for affected portions of utility work and, shall be processed with EP-7 funds.

5. Excavation:

All excavators shall notify the NYC/LI One Call Center at 1-800-272-4480 at least two (2) working days, not including the day of the call, but not more than ten (10) working days in advance of the start of any excavation work. The gas company(ies) will mark out its facilities within the project limits and provide Construction Inspector(s) during all excavation work in close proximity (within twelve (12) inches) to gas facilities. The Contractor shall exercise extreme caution when excavating in the vicinity of any gas facilities. Hand excavation shall be performed within twelve (12) inches of gas facilities. The Contractor prior to excavating underneath these facilities shall adequately support all gas facilities. Standard support details for gas facilities have been included in the specifications. Any damage to gas facilities shall be reported immediately to the gas company(ies). The Contractor shall be responsible for all cost associated with repairs made necessary by damages caused by his operations.

6. Backfilling And Street Restoration:

Backfilling operations and street restorations shall be in accordance with contract requirements.

7. Non-Responsive Bids:

Every gas (EP-7) bid item has a suggested "Not less than" value per unit indicated on contract bid sheet. Bids resulting in cost of less than suggested for EP-7 items are hereby prohibited and if submitted shall be considered NON-RESPONSIVE.

8. Minimum Clearances:

Clearance requirements for City work shall govern and supersede any clearance requirement of gas facility operator. Therefore, a minimum of twelve (12) inches clearance between private utilities and City water mains, sewers or related structures to be installed in this contract shall be maintained. When this clearance is not attainable, the Resident Engineer may allow a minimum of four (4) inches clearance. With less than twelve (12) inches clearance a neoprene/polyethylene shield (to be provided by facility operator) shall be installed as part of all work item specifications. However, if Resident Engineer determines that City work cannot be performed within allowable clearance and no reasonable City accommodation (nocost change to City work) is possible, the City shall direct the facility operator to remove, relocate, shift, or alter their facility(ies) pursuant to the New York City Administrative Code.

9. Work By Facility Operator:

The facility operator may find it necessary to perform the following types of work during performance of City work: accommodating a contractor's request for gas facilities modifications (in order to facilitate City contractor's proposed construction method) or, remedial and emergency work on gas facilities proper with their own resources and materials if an approved method of construction for City work causes unanticipated disturbances to gas facilities or, replacing defective gas facilities when they are exposed by the Contractor and their actual conditions are observable by the facility operator. Also included in the above category of defective gas facilities are: the presence of environmental contaminants attributable to the gas facility in or around gas facilities. If such work is deemed required by the facility operator or if facility operator is directed by the City to address such deficiencies at any time during the course of construction, the Contractor shall modify the construction schedule at no cost to the City and allow the facility operator (in cases of accommodations) or, Contractor (in cases of defective gas facilities) due to such gas work, if any, shall be the responsibility of the parties involved and not of the City. Such costs shall be a matter of adjustment between the Contractor and the facility operator.

10. Materials Furnished By Facility Operator:

It shall be the Contractor's responsibility to inspect material to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional costs to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

11. Liability And Insurance:

Notwithstanding the provisions of this contract, the existing division of liabilities to third parties shall remain the same as between the City and the company. Therefore, it is specifically agreed by the City, company and Contractor (by bidding on this contract) that for the purpose of any liabilities to third parties, that the City contractor performing work directly and physically relating to gas company facilities in this project, shall be deemed an agent of the company and not an agent of the City, the New York City Municipal Water Finance Authority, or the New York City Water Board. Contractor shall include the company as an additional insured on all insurance policies maintained to comply with the City's insurance requirements.

12. Width And Depth Of Excavation:

Contractor shall not be authorized to deliberately change trench or excavation widths and/or depth specified without Engineer's approval. Enlargement of any side of excavation up to eighteen (18) inches beyond pay limits (or inside face of sheeting) requested by the Contractor for the installation of certain types of sheeting may be granted. However, such enlargements or those greater than allowable shall not be approved when, in the sole judgment of the City, field conditions allow the water mains and sewer work to be performed within the limits specified and, the sole purpose of such enlargement request is to impact adjacent utilities (public or private) whose support and protection are part of this contract. Any approval shall be given at no additional cost to the City contract, including EP-7 funding, and all costs associated with unauthorized enlargements shall be the sole responsibility of the Contractor.

13. Depth And Crossing Angles Of Gas Facilities:

Where gas facilities are shown (or specified as) crossing proposed alignment of sewers, water mains, catch basins and chute connections or any other proposed excavations at specific angles (as measured off plans or sketches or specified in contract), it shall be understood that actual field measurements may deviate (plus or minus) forty-five (45) degrees from those shown or specified. The cover, or depth from street surface to top of facilities, shall be as shown or specified in contract documents, no deviation is to be assumed. Where gas facilities are not shown on contract documents, but their support and protection are otherwise included in this contract then, all references to facilities crossing at "various angles and depth" in the gas sections shall mean that such facilities are crossing sewer, water, catch basin and, catch basin chute, and other excavations at a ninety (90) degree angle to the proposed sheeting line or side of

excavation (for unsheeted trenches) with an allowable deviation of forty-five (45) degrees in any direction, except for catch basin chute excavation where the allowable deviation shall be sixty (60) degrees. Where the cover is not noted or specified, the bottom face of such facilities shall be assumed to be crossing catch basin chutes at a depth of three (3) foot eight (8) inches or less from the street surface. Paragraph No. 2 above shall apply in cases of distribution water main construction. Appropriate bid items and specifications are provided for cases where angle and depth are greater than stated above. This section also applies to work defined in "Emergency Reconstruction Contracts" or so-called "Where and When Contracts". These contracts are not pre-engineered and consequently have no drawings, sketches or determined locations and so, gas facilities encountered will be crossing existing and proposed sewer, water, catch basin/catch basin chutes and all appurtenances at various angles and depths.

14. Maintenance Of Traffic For Gas Work:

All work pertaining to gas bid items and specifications shall be performed within the contract maintenance of traffic plan as specified in the contract document. The bid price for the Maintenance and Protection of Traffic shall cover all work pertaining to gas items. The City shall make compensation for additional maintenance and protection of traffic items in connection with gas item of work only when such additional work is deemed reasonable and necessary by the Resident Engineer and is approved by him prior to its performance.

15. Relocated Gas And Temporary Systems Installation:

In cases where the Contractor is allowed to select the location for temporary construction such as, installation of dewatering headers, wells, well points, etc., he shall not disturb any gas facilities shown on sketches provided in this section. The only exception shall be, if the affected gas company agrees to such relocation and provided that the cost of such relocation is a matter of adjustment between the company and Contractor, and at no cost to the City.

16. Role Of Company Inspector:

In any case in which the City elects to perform some or all support and protection work with its own employees, personnel or contractors, the facility operator shall provide onsite inspectors to approve and certify such support and protection work (exclusive of City accommodations) performed by the City's own employees, personnel, and contractors. Facility operator's inspectors are not authorized to direct City contractor during the performance of contract work. They shall act through the City Resident Engineer and provide him/her required approvals and certifications, prior to preparing partial payments of EP-7 items, in a format and frequency to be prescribed by the appropriate City Head of Construction.

17. Coordination With Gas Company:

The Contractor shall be required to notify the gas company(ies), in writing, at least two (2) weeks prior to the start of final paving in order to allow companies to complete any unfinished gas work located within the area to be paved. Every effort shall be made to maintain gas service with minimum inconvenience to the public.

III - TECHNICAL SECTION

SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, and incidentals required to

support and/or protect the integrity of gas mains, services and appurtenances of any sizes, configurations, and operating pressures crossing trench excavations above subgrade for planned construction of sewers and water mains facilities. A gas service shall be defined as a gas pipe of three (3) inches in diameter or less branching from the main to a customer pick up point or property valve box. A gas main may be any size pipe that is part of a distribution or transmission network other than services described above. Crossings shall be defined as gas facilities spanning the width of excavation (one side to the other side). These crossings may be at various angles and depth as shown on "Gas Cost Sharing Work Standard Sketches Nos. 1 and 1A", and as specified in "General Provisions; Gas Cost Sharing Work Paragraph No. 13" and, at the locations shown or listed in contract documents. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with contract specifications, plans, and at the directions of the Resident Engineer in consultation with the authorized representatives of the facility operator.

2. Method Of Construction:

- A. Protection: In general, the gas facilities shall be protected as required by New York State Industrial Code 753. In particular, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the gas facilities (marked out by facility operators) and to ascertain the clearances and cover of the facilities with respect to the proposed excavation. Upon exposing the affected facilities sufficiently, at the discretion of the Resident Engineer, to ascertain the foregoing, Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, outside a zone of protection whose limit shall be defined as a perimeter located twelve (12) inches from the outside face of each gas facility crossings (See "Gas Cost Sharing Work Standard Sketch No. 2"). If the facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained, and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07, and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".
- B. Support: Gas mains or services crossing excavations equal or less than four (4) feet wide are generally self supporting, unless field conditions as determined by the Resident Engineer require otherwise. The support requirements for gas mains and services crossing excavations greater than four (4) feet wide shall be as shown on the attached "Gas Cost Sharing Work Standard Sketch No. 1" and Contractor shall use sheeting methods that permit the maintenance of gas facilities in their existing locations and configurations. Alternate methods equivalent to those shown on the sketch or accommodations by the facility operator proposed by the Contractor in order to facilitate the execution of the specified work shall be allowable, provided that prior approval is obtained by the Contractor from the Engineer and the facility operator. The support and protection of gas facilities crossings shown on plans, drawings, listings or otherwise identified in this contract shall not be circumvented with the issuance of so called "order outs".

3. Method Of Measurement:

The Contractor shall be paid for supporting and/or protecting gas facilities crossing trench excavations under the appropriate bid items covered by this section. The Contractor shall be directly responsible to the facility operator for the total cost of using any alternate method requiring the use of resources owned by the facility operator. Regardless of the method used, the City shall pay the bid price for the appropriate support and/or protect item of work. The average rate charged by the facility operator for alternate support and protection work such as, disconnecting and reconnecting gas services is listed in attached "Schedule GCS-A".

4. Payment Restrictions:

These items shall not be paid for: gas services crossing unsheeted water main trench excavation; abandoned gas main/services identified by facility operator; gas mains/services crossing trench excavations for fire hydrant branch connections pipes, catch basins and/or chutes (sewer drain pipe), house sewer and/or water services; gas facilities encroaching any face of excavation for sewer and/or

water construction, all of which are covered under other contract sections. Also this item shall not be paid for new gas mains and services crossing water trenches when trenching for such new facilities has been performed by the Contractor in common with trench excavation for City work (overlapping trench limits). The cost of supporting and protecting such gas facilities crossings shall be deemed included in the cost of trench excavation for the new gas facilities. This payment restriction shall apply even if such common trench gas excavation is not part of the contract. The prices bid for items covered by this section represent full compensation to Contractor to completely perform the work described. No other bid items shall be combined with these items in order to pay for gas main and/or services crossing excavations specified herein.

5. Method Of Payment:

Each (Ea.) gas facility crossing trench excavation as described in these specifications shall be counted for payment.

6. Price To Cover:

The cost of timber/steel supports installed for gas facilities shall be included in the bid price. The bid price for each crossing shall also cover all additional supervision, labor, material (except those provided by the facility operator), equipment and insurance necessary to completely maintain the gas facilities without disruption of service to the customers and in accordance with contract plans, specifications and facility operator standards. The price shall also include: changes of method of operations; sheeting modifications where necessary to accommodate the gas facilities crossings; installation and removal of water pipe under gas facilities (so called "snaking"); extra care during excavation (including hand excavation under existing single and multiple gas facilities); extra backfilling and compaction around, over and under gas facilities; installation and removal of sheeting around gas facilities; associated maintenance and protection of traffic; barricades; and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals for the extra excavation associated with the installation of catch basin sewer drain pipes (chute) under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents and also, for the support and protection of these facilities during associated excavation and backfill operations. The gas company operating in the area, (facility operator), owns these facilities.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation is required when catch basin sewer drain pipes are installed at an upstream invert depth lower than four (4) feet (up to a maximum of six (6) feet) from the proposed pavement grade because the bottom faces of interfering gas mains and appurtenances are located at a depth greater than three (3) foot eight (8) inches from proposed pavement surface (See "Gas Cost Sharing Work Standard Sketch No. 4").

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered starting from catch basin structure proper and that prevents the installation of the chute connection at an upstream cover less than or equal to three (3) feet or any other minimum cover required to avoid City facilities (e.g. water, sewer, etc.) as directed by the Resident Engineer.

4. Payment Restrictions:

This item shall not apply and related bid item shall not be paid in cases where:

- A. Upstream invert chute is more than six (6) feet deep because of gas facilities.
- B. Chute cannot be installed above existing gas facilities because of interferences with other private facilities that are not otherwise covered under this contract, regardless of upstream invert depth.

The above cases shall be at no cost to the City, but shall be a matter of adjustment between the Contractor and the facility operator(s).

5. Price To Cover:

The bid price shall cover the additional cost of all additional supervision, labor, materials, equipment and insurance, to complete the installation of catch basins and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities; backfilling and all other items necessary to perform all work incidental thereto including: installation and removal of drain pipe under gas facilities ("snaking"); widening of trenches to facilitate the above work; subsequent additional backfill and pavement restoration; modifying precast catch basin window to accommodate connection; changing sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work. The price shall not include removal of ledge rock and/or excavation of boulders in open cut.

SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals for the extra excavation of catch basin chutes where the upstream invert is greater than six (6) feet under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents or as determined by field conditions and also, for the support and protection of these facilities during the associated excavation, sheeting and backfilling operations.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation and sheeting is required when the catch basin chute installed at an upstream invert depth lower than six (6) feet from the proposed pavement grade because the bottom faces of the interfering gas mains and appurtenances are located at a greater depth than three foot eight inches from the proposed pavement surface only.

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered during such excavation when initiated from catch basin structure and that prevents the installation of the chute at an upstream cover less than or equal to three (3) feet or any other cover required to avoid City facilities as directed by the Resident Engineer.

4. Payment Restriction:

This item shall not apply and related bid item shall not be paid in cases where: Upstream invert chute is less than or equal to six (6) feet deep because of gas facilities. Section 6.02 shall be paid.

5. Price To Cover:

The bid price shall cover the additional cost of all supervision, labor, materials, equipment and insurance to complete the installation of catch basin and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities incidental thereto; widening of trenches to facilitate the above work; subsequent additional backfilling and pavement restoration; modifying pre-cast basin window to accommodate connection; the installation of catch basin with deeper sumps as specified; additional sheeting and changes in sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services, or appurtenances thereof, located within the street shown on the contract plans, owned by gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any resulting from this choice shall be a matter of adjustment between the Contractor and facility operator only, and at no cost to the City.

3. Restrictions:

The facility operator shall be solely responsible for its contaminated gas facilities, surrounding contaminated soil and their disposal and abatement procedures, unless contract bid items are applicable and provided for such work. In such cases, the quantity removed shall be charged to EP-7 bid item "<u>UTL- GCS-2WS-GAS INTERFERENCES AND ACCOMMODATIONS</u>" at the City bid prices.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment, and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, support and protection of such properties. The price shall also cover breaking, cutting, and/or burning of abandoned gas pipes and their disposal from the site; sealing open ends remaining in the excavation with concrete or caps (caps to be provided by the facility operator) and backfilling of the area where the pipeline has been removed with clean backfill. The price shall also include any required dump charges. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and restoration associated with abandoned gas facilities removal, all of which are covered under Section 6.06.

SECTION 6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For National Grid Work Only)

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services or appurtenances thereof, located within the street shown on the contract plans, owned by the gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap and so, may require special handling and disposal methods as specified in National Grid Standard Operating Procedure 12-2, Coal Tar Wrap Handling and 12NYCRR56.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, the Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, the facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost to the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Wrap then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The City Contractor shall excavate abandoned gas facility sufficiently, either in its entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or City structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractor's trench by authorized National Grid personnel who will remove the Coal Tar Wrap as per National Grid procedures. This work by National Grid personnel shall be performed in a timely fashion and shall not unduly impede the Contractor's progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. The

Contractor at a site designated by the Contractor shall stockpile the removed pipe. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance and protection of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be provided by the facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor's excavation method, additional trucking and/or stockpiling costs.

SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)

1. Description:

Under this section the Contractor shall provide all labor, material, equipment, insurance and, incidentals required to prepare abandoned gas mains, services and appurtenances thereof located within the street shown on contract plans, owned by the gas company operating in the project area (facility operator), for removal due to interference with proposed City work. These abandoned gas facilities were, at one time, used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural, manufactured or a combination of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distribution or furnishing of gas in enclosed containers. Such preparation for removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap which may contain asbestos or PCB's and so, may require special handling and disposal methods as specified in Con Edison - ASBESTOS MANAGEMENT MANUAL, CHAPTER 6 - ASBESTOS WORK PROCEDURES, SECTION 06.04 - COAL TAR WRAP REMOVAL. For under 25' (feet) in length and an approved NYC-DEP variance for over 25' (feet).

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas Facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility

operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities. However, the facility operator may prefer to make this test during performance of City work in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Warp then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The Contractor shall excavate abandoned gas facility sufficiently, either in it's entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or city structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractors trench by authorized Con Edison personnel who will remove the Coal Tar Wrap as per Con Edison and/or NYC-DEP approved procedures. This access shall conform to all applicable codes, rules & regulations. This work by Con Edison personnel shall be performed in a timely fashion and shall not unduly impede the Contractors progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. Contractor shall designate a specific site to stockpile those removed pipes. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas facility removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the plans and specifications, including, but not limited to, excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be supplied by facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor excavation method, additional trucking and/or stockpiling costs.

SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaying.)

1. Description:

Under this section, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to final grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in concurrence with authorized representative of the facility operator.

2. Materials:

The facility operator shall furnish and deliver all prefabricated hardware parts required. These include adaptors for the grade adjustment proper and new street hardware if existing ones are found to be defective, all in accordance with the facility operator standards and City rules and regulations. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Method Of Measurement:

The Contractor shall be paid for each six (6) inch round box and/or nine (9) inch square box adjusted to grade regardless of adjustment height requirements.

4. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each box to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities to be salvaged and returned to the facility operator and, all material transportation from the Contractor's material storage yard to the work site. In addition the bid price shall include "chipping" around existing box using appropriate means and methods where grinding is required.

SECTION 6.05 - Adjust Hardware To Grade By Resetting. (Road Reconstruction.)

1. Description:

Under this item, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to the proposed grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall consist of either building up or lowering or resetting the casting by removing the existing frame and cover building up or decreasing the existing installation, replacing the frame and/or cover if damaged or worn out, as determined by the Resident Engineer, with a new frame and/or cover furnished by the owner, and setting the frame and cover to new elevation. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer.

2. Materials:

The facility operator shall furnish and deliver all new hardware parts required. The Contractor shall furnish materials such as mortar, bricks and concrete in compliance with contract requirements. At locations where high-early strength concrete is required under this contract to be placed adjacent to gas facilities,

then the requirement for concrete shall be high-early strength complying with the current New York State Department of Transportation, Standard Specifications for Class F concrete. Existing castings may be replaced as required and deemed necessary by the Engineer and by City rules and regulations. The Contractor shall install the new castings of various sizes furnished by the facility operator. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site and, shall provide off-loading services to the facility operator. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. Such delays shall be a matter of adjustment between the Contractor and the facility operator. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him, immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Methods Of Construction:

The Contractor shall remove and reinstall existing castings or install new castings to the proposed grade. Setting and resetting the castings shall be done with mortar and brick according to the standards of the facility operator. Work shall be performed in a workmanlike manner. Castings that are deemed unacceptable for resetting shall remain the property of the facility operator and he shall be responsible for their removal and proper disposal from site. No traffic shall be allowed on adjusted street hardware until permitted by the Engineer.

4. Method Of Measurement:

The Contractor shall be paid for each gas hardware adjusted to grade regardless of size or adjustment height requirements (up or down).

5. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each gas hardware to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities; building up the existing installations with bricks and mortar, or lowering the existing installation by removing bricks and mortar; replacing damaged frames and/or covers with new frames and/or covers furnished by the facility operator; setting the frames and covers to the new elevations; protect existing installations; repair minor structural damages to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; completing the work in accordance with the contract plans, specifications and, at the directions of the Engineer. In addition the bid price shall include "chipping" around existing gas facilities using appropriate means and methods where grinding is required.

SECTION 6.06 - Special Care Excavation And Backfilling.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to support and protect the integrity of live gas facilities including mains, services, related structures and appurtenances during excavations. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2. Applicability Of Section:

This section shall apply to live gas facilities of various sizes located within two (2) feet of any face of

unsheeted excavation, (unsheeted excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently sheeted using approved methods) and paralleling or, encroaching any face of excavation. Also, for crossings greater than forty-five (45) degrees and/or located at a cover depth greater than five (5) feet from existing street surface. Parallel facilities are not exposed at any time during excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). Encroaching facilities are partially exposed inside the limit of excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). This section shall also apply to gas facilities crossing catch basins excavation, and catch basins sewer connections (chutes) trench excavation only when extra depth (covered in other section), is not required for chutes installations because of such utilities interferences (See "Gas Cost Sharing Work Standard Sketch No. 3"). This section shall also apply to gas services (if shown or otherwise listed in contract documents) crossing unsheeted excavations for water mains, gas facilities crossing fire hydrant branch connections, house sewer and/or water service connections excavations. This section shall also apply for so called "loss trench", as described further, and for additional excavation (pavement and/or soil), backfilling, compaction, roadway base and pavement restoration due to abandoned gas facilities, only if removed by Contractor. If operating status of gas facilities cannot be determined prior to excavation then such facilities shall be considered live and this section shall fully apply. The excavation around fully exposed live gas facilities along and within limits of excavation (not crossings) shall be covered by this section also (not shown on "Gas Cost Sharing Work Standard Sketch No. 5"), however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the Contractor and facility operator.

3. Payment Restriction:

No special care excavation shall be paid for abandoned gas facilities paralleling and/or encroaching excavation and therefore are not in direct interference with City work. Except as allowed in this section, the bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the Contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07 and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".

4. Method Of Construction:

All excavation in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. Where these facilities are paralleling and located two (2) feet or less from the limits of the proposed excavation, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer, the Contractor shall then proceed with a combination of hand and machine excavation as required preserving the integrity of the facilities. The installation of timber supports or underpinning, when soil foundation cannot fully support partially exposed pipes, may be required to prevent pipe movement as directed by the Resident Engineer.

5. Method Of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method Of Measurement:

A. For Paralleling Facilities: Volume calculated as: Depth as measured from existing street surface to

the bottom of unsheeted trench excavation allowable by OSHA regulations, multiplied by, the width measured as one (1) foot from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5"). The gas facility is no longer considered to be in interference once sheeting has been installed, therefore no further compensation for paralleling facilities as described above will be made.

- B. For Encroaching Facilities: Volume calculated as: Depth of trench as allowable by OSHA, maximum up to five (5) feet multiplied by, the width of partially exposed pipe plus one (1) foot, multiplied by the length of facility encroachment, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5").
- C. Fully Exposed Gas Facilities: (Not shown on "Gas Cost Sharing Work Standard Sketch No. 5") along and inside trench and/or crossing trench at an angle greater than forty-five (45) degrees and/or a cover depth greater than five (5) feet from the existing street surface. The volume shall be measured as the depth of trench excavation multiplied by the distance measured along the sheeting line between two (2) points of intersections of the gas facilities and the sides of trench excavation, multiplied by the width of trench excavation.
- D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The Integrity Of Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be Maintained Due To Its Lack Of Cohesiveness: Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured as distance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) foot or a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").
- E. For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEP Funded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House Sewer And/Or Water Services: Volume calculated as: Depth as measured from existing street surface to the bottom of the trench excavation multiplied by, the width taken as the outside diameter of pipe or the width of structure plus one (1) foot on either side (two (2) feet), multiplied by, the length of exposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

Overlapping volume dimensions measured as described above may occur when multiple facilities are paralleling excavations, encroaching excavations or crossing catch basins and catch basin chute installations. In such cases, all such facilities shall be counted as one limited by the extreme pipes, faces (See "Gas Cost Sharing Work Standard Sketch No. 2"). The volume shall then be calculated as described above.

7. Price To Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, including the use of such methods as: hand excavation around existing single and multiple facilities, extra excavation and backfilling due to lost trench because of existing and adjacent gas facilities, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance and protection of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.06A - Special Care Excavation and Backfilling for Transmission Mains. (Transmission Main is described as any gas main with a MAOP greater than 124 psig) 1.Description:

Under this section, the contractor shall provide all labor, materials (except for sand to be utilized for backfill of a one-foot envelope around the facility to be furnished by the facility operator), equipment, and incidentals required to support and protect the integrity of Gas Transmission Main during excavations. This facility is owned by the gas company operating in the area, hereafter referred to as facility operator. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2.Applicability of Section:

This section shall apply to Transmission Main of various sizes located within any excavation sheeted or unsheeted (excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently unsheeted/sheeted using approved shoring methods and paralleling, encroaching, and crossing any excavation. Parallel facilities are not exposed at any time during excavation (within 2' of edge of excavation)). Encroaching facilities are partially/fully exposed inside the limit of excavation. This section shall also apply to gas facility crossing catch basins excavation and catch basins sewer connections (chutes), water mains, fire hydrant branch connections, sanitary sewer, storm sewer, combination sewer, house sewer and/or water service connections excavations. The excavation around fully exposed live gas facilities along and within limits of excavation shall be covered by this section also, however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the contractor and facility operator.

3.Payment Restriction:

The bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "minimum clearances" described in the General Provisions for Gas Cost Sharing (Para. No.8) cannot be maintained, the excavation shall be abandoned and the contractor shall be compensated as per the provisions specified in Paragraphs Nos. 5 and 6 of this item (6.06A).

4.Method of Construction:

All excavations in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. No saw cutting of pavement or masonry for gas mains having less than 2 feet of cover to break asphalt/concrete as determined by the facility operator. The contractor shall use power excavation for the removal of pavement or masonry but only to the depth of such pavement or masonry (breaking of pavement or masonry shall be done by means of hand held pneumatic breaking equipment). Upon removal of pavement or masonry the contractor shall use hand excavation methods only (pick and shovel; no power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer and the facility operator the contractor shall then proceed with hand only within the zone of protection described as 2 feet from the face of the facility in all directions of the facility as required to

preserve the integrity of the facility. Once outside of the zone of protection as described above the contractor may use a combination of hand and machine to complete the excavation.

5.Method of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with special care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6.Method of Measurement:

A.For Paralleling Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility,multiplied by, the width measured as two (2) feet from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

B.For Encroaching Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multipliedby, the width measured as two (2) feet plus the exposed facility toward the center of excavation, multiplied by the length of the encroached facility, divided by twenty-seven (27) cubic feet per cubic yard. Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face offacility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

C.Fully Exposed Gas Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multipliedby, the width measured as two (2) feet from the face of the facility on either side plus the facility, multipliedby the length of the facility, divided by 27 cubic feet per cubic yard. Only hand excavation shall be utilizedwithin the zone of protection identified as 2 feet from face of facility in all directions, beyond 2 feet fromthe face of facility in all directions the contractor can use a combination of hand and machine.

D.For Additional Excavation And Restoration Due To So Called "Loss Trench", When The IntegrityOf Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be

maintained DueTo Its Lack of Cohesiveness:

Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured asdistance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) footor a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven(27)cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

E.For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEPFunded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House SewerAnd/Or Water Services:

Volume calculated as: Depth as defined above multiplied by, the width taken as the outside diameter ofpipe or the width of structure plus one (1) foot on either side (two (2) feet), multiplied by, the length of exposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

7.Price to Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities

without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer, sanitary sewer, storm sewer, combination sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work. Breaking shall be done by means of hand held pneumatic breaking equipment. Inspection of exposed mains shall be performed by facility operator in a timely fashion and shall not unduly impede contractor's progress or productivity.

SECTION 6.07 - Test Pits For Gas Facilities.

1. Description:

Under this section, the Contractor shall furnish all labor, materials, insurance, equipment and appliances necessary to excavate, sheet and, maintain test pits at locations approved by the Resident Engineer in consultation with the facility operator. Test pits shall be dug in order to ascertain exact locations, cover and invert elevations, clearances, alignment and operating status (live or dead) of existing gas facilities. The Contractor shall inspect jointly with the Resident Engineer and facility operator, gas facilities and other structures uncovered, take all relevant measurements and elevations as directed by the Resident Engineer. Tests to determine operating status of gas facilities shall be performed by facility operator. The pits shall be covered with steel plates during daytime nonworking hours, and uncovered, as required, until the inspection work is completed. Testing of gas facilities may require a maximum of four (4) hours. Then, the pits shall be backfilled with clean fill, and resurfaced with temporary pavement. All traffic shall be maintained and all safety measures as stipulated shall be complied with.

2. Methods Of Construction:

- A. Excavation: Existing pavement to be removed shall be neatly cut along lines of removal with a saw or other approved equipment which leaves a neat straight joint line along the juncture with subsequently replaced pavement. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. Use of hand operated pneumatic and electric jackhammers will be permitted only for breaking pavement and removal of masonry, concrete and boulders, or as otherwise directed by the Resident Engineer. The Contractor shall properly dispose of all materials excavated from test pits away from site. Test pits shall be excavated at locations shown on the contract drawings or as directed by the Resident Engineer. Additional test pits may be required and shall be excavated where required, as ordered by the Resident Engineer. All test pits shall be excavated to a depth and size necessary to locate the existing facilities. Sheeting shall be used when depth of excavation exceeds five (5) feet. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Codes requirements and as specified in contract, whichever is more stringent. Care shall be taken that no existing gas facilities or other structures are broken or damaged. All broken or damaged facilities shall be reported immediately to facility operator who shall decide whether such facilities shall be repaired or replaced by company forces or by City contractor and in conformance with "General Provisions; Gas Cost Sharing Work Paragraph No. 9". Contractor shall excavate all material encountered, including large masses of concrete, cemented masonry and boulders, as directed by the Resident Engineer. Any type of excavation protection used, shall satisfy the following:
 - (a) Industrial Code Rule 753.
 - (b) Prevent injury to workers and the public, and avoid damage to existing water, sewer, and gas pipes or other structures, and to pavements and their foundations, through caving or sliding of the banks of the excavation.

Should it become necessary, as determined by the Resident Engineer, to enlarge any test pit in any dimension after sheeting has been placed, the Contractor shall remove portions of the sheeting, as necessary, enlarge the test pits as directed, and replace the sheeting without additional compensation for this work other than for the additional volume of material excavated.

B. Maintenance Of Test Pits: Excavated test pits shall be maintained free of debris and kept dry by the Contractor in order to permit the inspection and measurements and to determine the locations of facilities. In order to accomplish this, Contractor shall, upon completion of excavation and placement of sheeting (if depth greater than five (5) feet), furnish and install adequate steel plates and posting over the excavated pits and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during nonworking hours. The Contractor shall then, at no additional cost, relocate such barricades, barrels, cones and other warning devices and remove steel plates, as and when directed by the Resident Engineer to facilitate the inspection of exposed facilities. When work is being performed and the pits are not covered with steel plates, the

Contractor shall provide complete and safe access to the test pits as may be required, and he shall provide construction barricades and maintain traffic at all times as shown or as directed by the Resident Engineer. Upon completion of test pit inspection by the Resident Engineer, the pit shall be backfilled by the Contractor as specified in contract, except that backfill material shall conform to contract specifications for such purpose.

C. Pavement And Sidewalk Restoration: After backfilling is completed, the Contractor shall construct a temporary pavement consisting of a minimum of four (4) inches thick asphaltic concrete mixture in roadway areas or a two (2) inches thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent pavement and sidewalk replacement is constructed as specified in contract.

3. Measurements:

The quantity to be measured for payment shall be the number of cubic yards of material removed from within the limits of the pit dimensions as directed by the Resident Engineer. The volume occupied by existing pipes or other structures remaining within the maximum payment lines will not be deducted from the total volume measured except, where the cross sectional area of these facilities exceeds four (4) square feet. As determined by the Resident Engineer, the quantity measured for payment may be proportionate to a fair and reasonable estimate of gas responsibility in the total volume excavated.

4. Price To Cover:

The contract price bid per cubic yard for test pits shall cover all additional costs of labor, material, insurance, equipment, appliances and incidentals required to excavate test pits, including removal and disposal of excavated materials, sheeting, steel plating, backfill, compaction and temporary pavement and sidewalk restoration all in accordance with the specifications and as directed by the Resident Engineer. The price shall also include the cost of providing safe access to the excavation by facility operator for the performance of certain test to determine operating status of gas facilities prior to City work. The price shall also include support and protection of all gas facilities crossing excavation, paralleling and/or encroaching any face of excavation.

SECTION 6.08 - "NO TEXT"

SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services (For National Grid Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

3. Method of Construction:

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat

straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. National Grid forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all National Grid hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

SECTION 6.09a Trench Excavation and Backfill for New Gas Mains and Services (For Con Edison Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer. Clean sand backfill material shall be used and shall conform to Con Edison specification EO-1181-rev.6, General Specification for Backfilling of Trench and Small Openings.

3. Method of Construction:

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as

directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The width and depth of the trench shall conform to Con Edison Gas Operations drawing 309495 rev. 4, Trench Excavation for Gas Mains Up to 350 PSIG, or as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. Con Edison forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all Con Edison hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on contract

drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

Project ID: SANDHWSIB

GAS COST SHARING STANDARD SPECIFICATIONS SCHEDULE GCS-A

Average rate charged by utility companies to Disconnect and Reconnect Gas Services:

1. National Grid

- \$586.90 per Service/and Visit

2. Con Edison

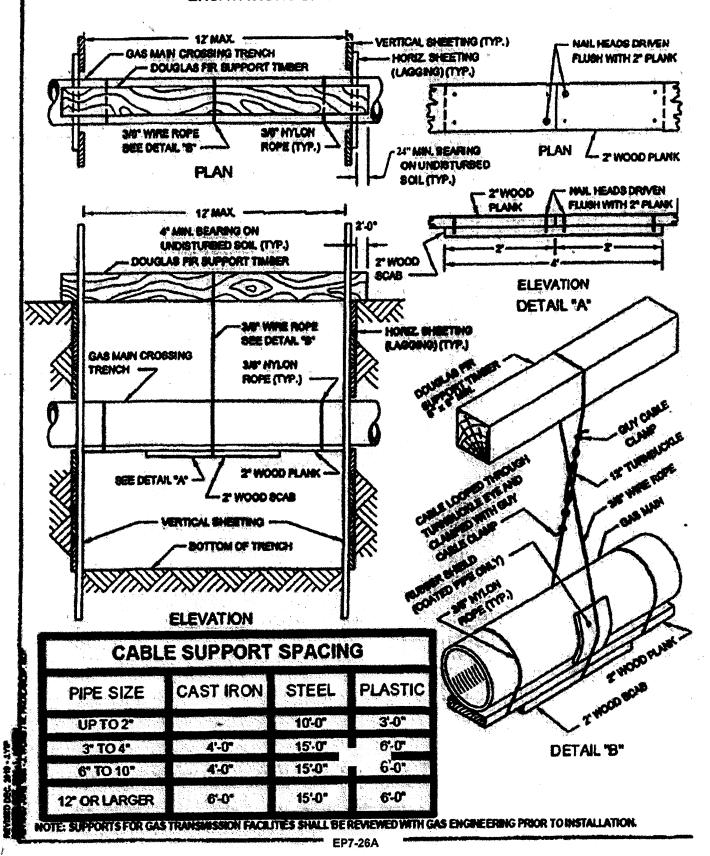
- \$524.00 per Service/and Visit

IV - STANDARD SKETCHES; GAS COST SHARING WORK

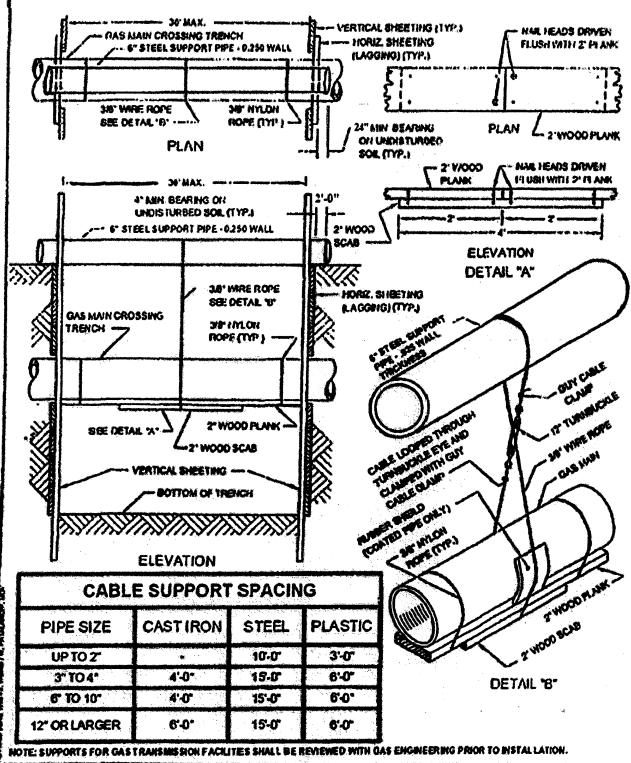
Hereinafter attached are the following Standard Sketches for Gas Cost Sharing Work:

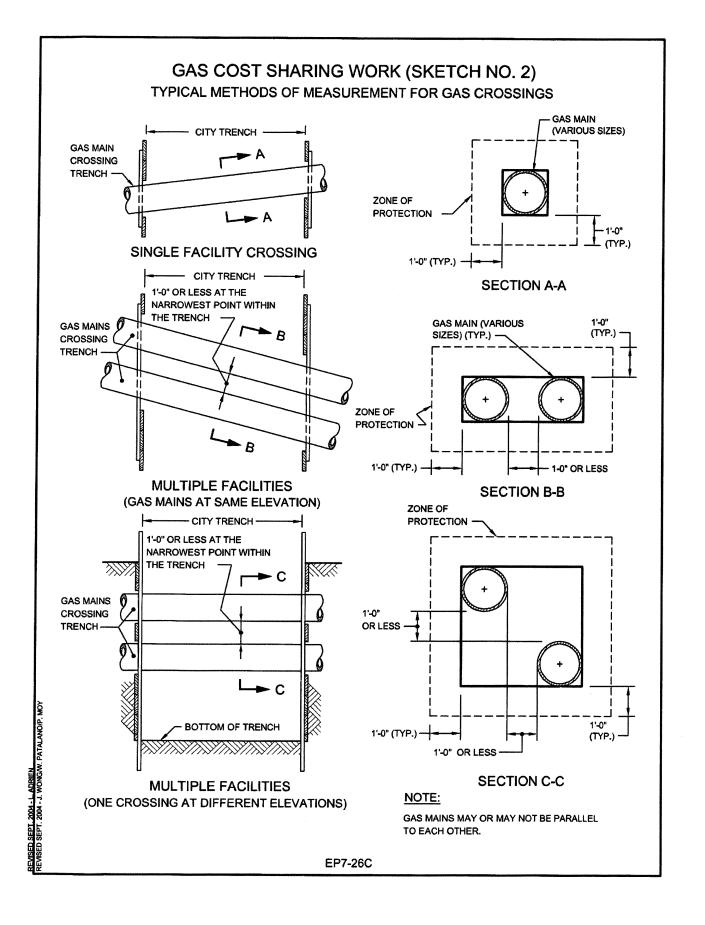
- Sketch No. 1 Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4' 0" Wide At Any Angle
- Sketch No. 1A Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
- Sketch No. 2 Typical Methods Of Measurement For Gas Crossings
- Sketch No. 3 Utility Crossings During Catch Basin Chute Connection Pipe Installation
- Sketch No. 4 Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
- Sketch No. 5 Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

GAS COST SHARING WORK (SKETCH NO. 1) SUPPORT REQUIREMENTS FOR GAS MAINS SUSPENDED IN EXCAVATIONS UP TO 12'-0" WIDE AT ANY ANGLE



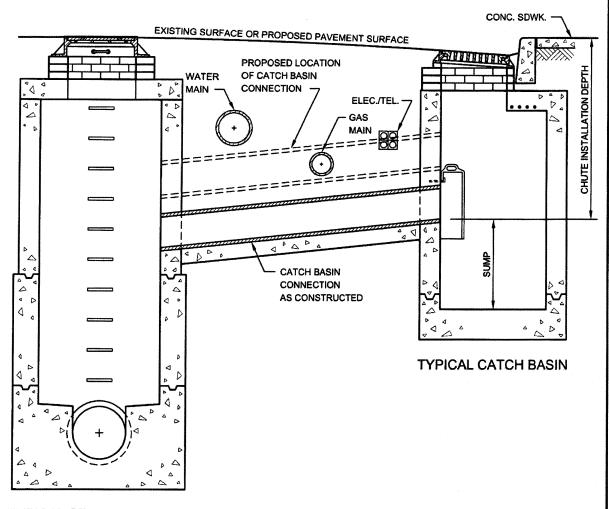
GAS COST SHARING WORK (SKETCH NO. 1A) SUPPORT REQUIREMENTS FOR GAS MAINS SUSPENDED IN EXCAVATIONS BETWEEN 12'-0" AND 30'-0" WIDE AT ANY ANGLE





GAS COST SHARING WORK (SKETCH NO. 3) UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION CONC. SDWK. EXISTING SURFACE OR PROPOSED PAVEMENT SURFACE WATER MAIN ELECTRIC/TELEPHONE GAS MAIN TYPICAL CATCH BASIN **TYPICAL SEWER MANHOLE** EP7-26D

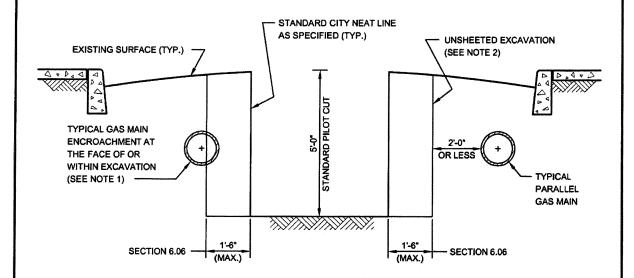
GAS COST SHARING WORK (SKETCH NO. 4) UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



TYPICAL SEWER MANHOLE

EP7-26E

GAS COST SHARING WORK (SKETCH NO. 5) GAS MAIN ENCROACHMENT ON AND/OR PARALLEL TO EXCAVATION OF UNSHEETED TRENCH



NOTES:

- (1) GAS MAIN LOCATED AS SHOWN MAY HAVE TO BE REMOVED BY THE FACILITY OPERATOR PRIOR TO THE START OF CITY EXCAVATION, OTHERWISE, THE CONTRACTOR WILL BE PAID UNDER SECTION 6.06 FOR THE SAID WORK. IF GAS MAIN IS ABANDONED THEN SECTION 6.03 SHALL APPLY.
- (2) EIGHTEEN (18) INCHES FROM STANDARD NEAT LINE IS THE MAXIMUM ALLOWABLE WIDTH OF AREA THAT MAY BE DISTURBED OR EXCAVATED DURING INSTALLATION OF CERTAIN TYPES OF SHEETING SYSTEMS THAT MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF THE DEPARTMENT OF DESIGN AND CONSTRUCTION OF THE CITY OF NEW YORK.

GAW PATA! ANO/P MOY

<u>V - PRELIMINARY GAS WORK TO BE PERFORMED BY</u> <u>FACILITY OPERATOR.</u>

APPLICABLE TO ALL GAS DRAWINGS:

- ALL SUPPORT AND PROTECTION WORK TO BE PERFORMED BY CITY CONTRACTOR
- NO CAPITAL WORK IS ANTICIPATED AT THIS TIME.
- IF ADDITIONAL INFORMATION IS NEEDED REGARDING THE FACILITY OPERATOR'S RELOCATION WORK, THE CONTRACTOR IS ADVISED TO CONTACT THE GAS COMPANY REPRESENTATIVE:

Neville Jacobs Jr.
NationalGrid Energy Delivery
287 Maspeth Avenue
Brooklyn, NY 11211
718-963-5612
Neville.Jacobs@nationalgrid.com

(NO TEXT IN THIS AREA, TURN PAGE)

<u>VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID</u> <u>ITEMS QUANTITIES.</u>

(NO TEXT IN THIS AREA, TURN PAGE)

SCOPE OF WORK SUPPORT AND PROTECTION FOR CONTRACT NUMBER SANDHWSIB

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

| 6.01.8 (NG) | Support & Protect Gas Services Crossing Trenches and/or Excavations (Ea.) |
|---|--|
| | 1 in 94 Swain Ave |
| 6.04 (NG) | Adjust Hardware to Grade Using Spacer Rings/Adaptors (Street repaving) (Ea.) |
| | 10 in Various Locations As Required |
| 6.05 (NG) | Adjust Hardware to Grade by Resetting (Road Reconstruction) (Ea.) |
| | 10 in Various Locations As Required |
| 6.06 (NG) | Special Care Excavation & Backfilling (C.Y.) |
| | 73 in various locations, as required |
| 6.07 (NG) Test Pits For Gas Facilities (C.Y.) | |
| | 10 in Various Locations As Required |

END OF EP7-PAGES

THE EP7-PAGES CONSIST OF THIRTY-NINE (39) PAGES

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.

SUPPLEMENTAL DOCUMENTATION FOR USE WITH SPECIFICATIONS FOR HANDLING, TRANSPORTATION, AND DISPOSAL OF POTENTIAL AND IDENTIFIED CONTAMINATED AND HAZARDOUS MATERIALS

CONSTRUCTION OF ROADWAY IMPROVEMENT INCLUDING SEWER AND WATER MAIN IN HUGUENOT AVENUE BETWEEN SHORE AVENUE AND CHESTER AVENUE AND SWAIM AVENUE BETWEEN SHORE AVENUE AND CHESTER AVENUE

BOROUGH OF STATEN ISLAND CITY OF NEW YORK

Project ID: SANDHWSIB

Prepared By:



These Haz-Pages are to be read in conjunction with the corresponding 8.01 sections of STANDARD HIGHWAY SPECIFICATIONS, May 16, 2022.

DDC Project No.: SANDHWSIB HAZ - 1

ATTACHMENT 1

Final

Phase I Corridor Assessment and Phase II Subsurface Corridor Investigation Report

For

Construction of Roadway Improvement in Huguenot Avenue
And
Swaim Avenue
Staten Island, New York

(LiRo Engineers, Inc., dated December 13, 2022)

DDC Project No.: SANDHWSIB HAZ - 2

- Final -

Phase I Corridor Assessment and Phase II Subsurface Corridor Investigation Report For

For the Construction of Roadway Improvement in Huguenot Avenue and Swaim Avenue Staten Island, New York

DDC PROJECT NO. SANDHWSIB

TASK ID NO. 2022OEHS0821-01 WORK ORDER NO. OEHS-20201409798-WOL-231

CONTRACT REGISTRATION NO. 20201409798

Prepared for:



Office of Environmental and Hazmat 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. 19-294-0265

December 13, 2022



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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) for the SANDHWSIB Corridor located in the Prince's Bay section of the Borough of Staten Island, New York. The proposed construction activities for the Corridor consist of the excavation for street reconstruction and installation of steel sheet piles on the water side ends of both reconstructed street segments including 2,160 square feet at Swaim Avenue and 1,800 square feet at Huguenot Avenue. Proposed work includes sewer, water main, street lighting, and traffic work. The approximately 526-foot long Corridor is comprised of the following street segments.

| Street Segments | Length (feet) |
|---|---------------|
| Huguenot Avenue between Shore Avenue and Chester Avenue | 286 |
| Swain Avenue between Shore Avenue and Chester Avenue | 240 |

A portion of the construction work may impact a New York City Department of Environmental Protection (NYCDEP) outfall. Therefore, the Phase II SCI is subject to additional review under City Environmental Quality Review (CEQR) by NYCDEP. The Phase II SCI Work Plan, site-specific Health and Safety Plan (HASP), and Phase I Corridor Assessment Report (CAR) were submitted, reviewed, and approved by the NYCDEP prior to performance of the Phase II SCI.

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 July 7, 2022 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 six 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 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.

After evaluation of the modifying information, no final "High" or "Moderate" risk sites were identified. The Figure that identifies the High and Moderate Risk Sites and the Appendix including the Corridor reconnaissance photographs was not generated.

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 Phase II SCI activities consisted of the following components:



- The advancement of two borings (SB-01 and SB-02) to a terminal depth of 17 feet below ground surface (ftbg). 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 ftbg using a vacuum excavator/air knife combination, post hole digger, and/or hand auger;
- Soil samples were collected to comply with the NYCDEP CEQR protocols:
 - o The collection of four grab soil samples which were analyzed for United States Environmental Protection Agency (USEPA) Target Compound List (TCL) volatile organic compounds (VOCs) via USEPA Method 8260C, TCL semi-volatile organic compounds (SVOCs) via USEPA Method 8270D, Polychlorinated Biphenyls (PCBs) via USEPA Method 3550B/8082, pesticides via USEPA Method 8081, and Target Analyte List (TAL) metals via USEPA 6000/7000 series Methods; and,
 - The collection of two composite soil samples which were analyzed for Total Petroleum Hydrocarbon Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO), Resource Conservation and Recovery Act (RCRA) Characteristics, and Toxicity Characteristic Leaching Procedure (TCLP) RCRA Metals.
- Soil Quality Assurance/Quality Control (QA/QC) samples were also collected to comply with the NYCDEP CEQR protocols and submitted for analysis for the following parameters:

Soil: duplicate soil sample (one in total – "SB-01-16.5-17.0-DUP") analyzed for TCL VOCs, TCL SVOCs, PCBs, pesticides, and TAL metals. The duplicate sample was collected from the same soil depth interval as one of the soil samples collected; and,

Soil: trip blank (one sample per day, one in total - "Trip Blank") analyzed for TCL VOCs. The trip blank includes an unopened water sample prepared by the laboratory which travels with the soil sample bottles from the laboratory to the field and from the field to the laboratory. The trip blank sample and the soil samples were not separated, and remained in the same cooler.

- While two temporary well points (TWPs) were proposed to be installed within the Work Plan, groundwater was not encountered within either of the soil borings. Therefore, no TWPs were installed and no groundwater samples were collected; 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) Subpart 375-6: Remedial Program Restricted Use Commercial (Track 2) Soil



Cleanup Objectives (SCOs), and/or, (2) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 371.

Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following findings, conclusions, and recommendations are presented:

Findings

- The subsurface soils encountered during this Phase II SCI consisted predominantly of reddish and dark brown fine to medium sand and gravel with some clay and with traces of silt from grade to 17 ftbg. Groundwater was not encountered within either of the on-site borings. Bedrock was not encountered during the Phase II SCI.
- Field screening (i.e., PID readings and visual and olfactory observations) did not identify impacted soils within the Corridor.
- One VOC, acetone, was detected in two of the four grab soil samples (SB-02-0-2.0 and SB-02-16.5-17.0) collected. This compound was detected at concentrations below the Restricted Use-Commercial (Track 2) SCOs. Acetone is a common laboratory cross-contaminant and is most likely not representative of the subsurface conditions.
- Multiple TAL metals, including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium (total), cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, vanadium, and/or zinc, were detected in all four grab soil samples collected. The reported concentrations were all below the applicable Restricted Use-Commercial (Track 2) SCOs.
- No SVOCs, pesticides, or PCBs were detected in the four grab samples collected.
- TCLP RCRA metals were not detected at concentrations exceeding RCRA limits in the two waste characterization soil samples collected.
- Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were within the acceptable RCRA ranges in the two composite samples collected.
- TPHC-DRO were detected at concentrations of 1.270 and 1.060 milligrams per kilograms (mg/kg) in SB-01-COMP and SB-02-COMP, respectively. TPHC-GRO were not detected in either of the composite samples collected. There are no regulatory standards for TPHC-DRO and TPHC-GRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste characterization prior to off-site disposal.
- One duplicate soil sample (SB-01-16.5-17.0-DUP) was collected from soil boring SB-01 and analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, and PCBs. The results for the duplicate sample were generally consistent with those detected within the primary soil sample. However, two pesticides, 4,4'-DDE and 4,4'-DDT, were detected within the duplicate sample but not the primary sample.



• One VOC, methylene chloride, was reported within the trip blank sample (Trip Blank) submitted for analysis (Table 4). Methylene chloride is a common laboratory cross-contaminant and is most likely not representative of the subsurface conditions.

Conclusions

- Field screening (i.e., PID readings and visual and olfactory observations) did not identify any petroleum-impacted soils within the Corridor;
- Laboratory analytical results did not identify sampled parameters exceeding the NYSDEC Restricted Use Commercial SCOs in the samples;
- Laboratory analytical results did not identify petroleum-impacted soils throughout the Corridor;
- The subsurface soil samples collected from the Corridor did not exhibit hazardous waste characteristics; and,
- Since groundwater was not encountered, no groundwater samples were collected.

Recommendations

- The Contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of non-hazardous contaminated soil. All soil shall be managed, transported and disposed of in accordance with NYSDEC Part 360 requirements. The Contractor should submit a Material Handling Plan, to identify the specific protocols and procedures that will be employed to manage potentially contaminated waste, if encountered, during construction, in accordance with applicable regulations;
- Due to the presence of TPH DRO in the investigated Corridor, to minimize the creation and dispersion of fugitive airborne dust, the Contractor may implement dust control measures to minimize potential airborne contaminants released as a direct result of construction activities. A Community Air Monitoring Plan (CAMP) shall be developed in accordance with NYSDEC DER-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities;
- Should dewatering become necessary during construction activities within the Corridor, the
 Contractor will be required to obtain a NYCDEP sewer discharge permit. 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 Corridor-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), the New York State Department of Health (NYSDOH) and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns (i.e., dust control procedures for TPH 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) for the SANDHWSIB Corridor located in the Prince's Bay section of the Borough of Staten Island, New York. The proposed construction activities for the Corridor consist of the excavation for street reconstruction and installation of steel sheet piles on the water side ends of both reconstructed street segments including 2,160 square feet at Swaim Avenue and 1,800 square feet at Huguenot Avenue. Proposed work includes sewer, water main, street lighting, and traffic work. The approximately 526-foot long Corridor is comprised of the following street segments.

| Street Segments | Length (feet) |
|---|---------------|
| Huguenot Avenue between Shore Avenue and Chester Avenue | 286 |
| Swain Avenue between Shore Avenue and Chester Avenue | 240 |

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.

A portion of the construction work may impact a New York City Department of Environmental Protection (NYCDEP) outfall. Therefore, the Phase II SCI is subject to additional review under City Environmental Quality Review (CEQR) by NYCDEP. The Phase II SCI Work Plan, site-specific Health and Safety Plan (HASP), and Phase I Corridor Assessment Report (CAR) were submitted, reviewed, and approved by the NYCDEP prior to performance of the Phase II SCI.

Once the Phase I CA evaluation was completed, the scope of work for the 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.

Drilling activities for the field investigation were performed by Associated Environmental Services, Limited (AES) of Hauppauge, New York. Oversight of drilling activities was performed by LiRo. Laboratory analyses were provided by Chemtech of Mountainside, New Jersey, a NYS Department of

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Health (NYSDOH) certified laboratory (No. 11376). Field derived Quality Assurance/Quality Control samples (i.e., field blanks, trip blanks, duplicates) were not collected for this project. investigation was conducted on October 27, 2022 and consisted of the following components:

- The advancement of two borings (SB-01 and SB-02) to a terminal depth of approximately 17 ftbg.
- The borings were advanced using a GeoProbe direct push drill rig. Prior to direct push advancement, borings were cleared to a depth of 6 feet using a hand auger, post hole digger, and/or a vacuum excavator (Vacex). 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 Health and Safety Plan (HASP) was prepared prior to commencing field work.
- Field screening, classification, and identification of soil was conducted 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 visual and olfactory indicators of impacts as well as screening with a PID.
- The collection of one composite and two grab samples from each of the two soil boring locations (SB-01 and SB-02). The composite samples were comprised of soil from the entire boring column. The two grab samples were collected from the top 2 feet of each boring and the bottom 6-inch interval in each boring.
- Soil samples were collected to comply with the NYCDEP CEQR protocols:
 - The collection of four grab soil samples which were analyzed for United States Environmental Protection Agency (USEPA) Target Compound List (TCL) volatile organic compounds (VOCs) via USEPA Method 8260C, TCL semi-volatile organic compounds (SVOCs) via USEPA Method 8270D, Polychlorinated Biphenyls (PCBs) via USEPA Method 3550B/8082, pesticides via USEPA Method 8081, and Target Analyte List (TAL) metals via USEPA 6000/7000 series Methods; and,
 - The collection of two composite soil samples which were analyzed for Total Petroleum Hydrocarbon Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO), Resource Conservation and Recovery Act (RCRA) Characteristics, and Toxicity Characteristic Leaching Procedure (TCLP) RCRA Metals.
- Soil Quality Assurance/Quality Control (QA/QC) samples were also collected to comply with the NYCDEP CEQR protocols and submitted for analysis for the following parameters:
 - Soil: duplicate soil sample (one in total "SB-01-16.5-17.0-DUP") analyzed for TCL VOCs, TCL SVOCs, PCBs, pesticides, and TAL metals. The duplicate sample was collected from the same soil depth interval as one of the soil samples collected; and,
 - Soil: trip blank (one sample per day, one in total "Trip Blank") analyzed for TCL VOCs. The trip blank includes an unopened water sample prepared by the laboratory which travels with the soil sample bottles from the laboratory to the field and from the field to the laboratory. The trip blank sample and the soil samples were not separated, and remained in the same cooler.
- While two temporary well points (TWPs) were proposed to be installed within the Work Plan, groundwater was not encountered within either of the soil borings. Therefore, no TWPs were installed and no groundwater samples were collected.



2.0 CORRIDOR INFORMATION

2.1 Corridor Location, Description, and Use

The Corridor includes two separate segments which measure a total of 526-feet in length. The two segments are located in the Prince's Bay section of the Borough of Staten Island, New York. Currently, the Corridor is developed with paved roadways and existing infrastructure systems, and exhibits evidence of underground utilities, such as manholes, pavement scars, utility mark-outs, and valve covers throughout the roadways and sidewalk areas. Overhead utility lines are present throughout the Corridor. Adjoining property usage consists of residences. No properties of potential environmental concern were observed adjoining the Corridor at the time of the Corridor reconnaissance. An area map of the Corridor is presented as Figure 2.

2.2 Description of Surrounding Properties

The area surrounding the Corridor consists primarily of residences. No properties of potential environmental concern were observed surrounding the Corridor at the time of the Corridor reconnaissance.

2.3 Corridor and Regional Topographic Setting

LiRo reviewed the United States Geologic Survey (USGS) 7.5-minute Topographic Quadrangle Maps for Arthur Kill, New York (2022) to determine the topography at the Corridor. The Corridor exhibits a topographic elevation change of approximately 8 feet. The elevation of the Corridor varies from approximately from 25 feet above mean sea level (msl) near the shoreline to approximately 32 feet msl by Chester Avenue. Under natural conditions, surface runoff at the Corridor would be expected to follow the topography, which slopes to the south-southeast toward Raritan Bay.

2.4 Corridor and Regional Geology

Based on the *Geologic Map of New York State* (Lower Hudson Sheet dated 1970), the Site is located within the Coastal Plain Deposits, specifically within the Raritan Formation. The Raritan Formation is a coastal plain deposit characterized by clay, silty clay, sand, and gravel. The Coastal Plain Deposits range from zero to 2,000 feet.

Based on the Surficial Geologic Map of New York (Lower Hudson Sheet dated 1989), the surficial geology in the Site area is characterized by till moraine. The till morraine thickness varies from 30 to 90 feet.

The Site is located within the Atlantic Coastal Plain Physiographic Province, which is characterized by flat to gently undulating plains of unconsolidated sedimentary deposits. The Site is located within the southern portion of the Wisconsin glaciation of the New York/New England region.

The subsurface soils encountered during this Phase II SCI consisted predominantly of reddish and dark brown fine to medium sand and gravel with some clay and with traces of silt from grade to 17 ftbg. Bedrock was not encountered during the Phase II SCI.



2.5 Corridor and Regional Hydrogeology

The depth to the water table on Staten Island varies but generally follows surface topography. During the Phase II SCI, groundwater was not encountered within either of the on-site borings that were drilled to a depth of 17 ftbg. Based on the location and proximity of Raritan Bay relative to the Corridor, groundwater is anticipated at a depth of less than 25 ftbg and to flow towards the south.

Groundwater can also be influenced by seasonal fluctuations in precipitation, local variations in geology, tidal variations, underground anthropogenic structures, and/or local dewatering operations.

Based on the information supplied by National Wetlands Inventory and the NYSDEC Wetlands mapper, the Corridor does not fall within a state or national wetland area. The closest national wetland is located approximately 50 feet south of the Corridor and is identified as EIUBL (Estuarine Subtidal Unconsolidated Bottom Subtidal). While the Corridor is not located within a state wetland, the Corridor is located within the buffer of a NYSDEC mapped wetland. The associated mapped wetland is located approximately 475 feet northwest of the Corridor.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were accessed from the FEMA website. One map panel (Panel 3604970318F, revision 9/5/2007) indicates that the Corridor is located in Flood Zone X (Area of Minimal Flood Hazard).



3.0 PHASE I CA EVALUATION

Based on a review of the regulatory environmental database report and historical fire insurance maps, as well as observations from the Corridor reconnaissance, the Corridor was evaluated to determine potential environmental risks due to historical and current usage of the Corridor itself and adjacent properties. Sites identified from the Corridor reconnaissance, historical map review, and environmental database report evaluation are categorized using the DDC Risk Criteria in Table 1 and placed in a Risk Category of "High", "Moderate", or "Low", to allow for consistent evaluation of the potential risk posed by certain establishments.

3.1 Corridor Reconnaissance

A Corridor reconnaissance was performed by Ms. Eva Jakubowska of LiRo on July 7, 2022 to visually identify sites of potential environmental concern, based on their current use and/or conditions located within and adjoining the Corridor. Available project information and an environmental database report were used to identify and evaluate individual properties within and adjacent to the Corridor. The sites of potential environmental concern identified during the reconnaissance were correlated with street address, block and lot information, regulatory agency database listings, and Sanborn Map review. Adjoining and surrounding property usage consists of residences. No properties of potential environmental concern were observed at the time of the Corridor reconnaissance.

3.2 Historical Sanborn Map Review

Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut provided historical Sanborn Fire Insurance Maps for the Corridor. The purpose of the Sanborn Map review was to identify sites of potential environmental impact within and adjoining to the Corridor based on their historical use. LiRo reviewed copies of Sanborn Fire Insurance Maps for the Corridor for the years 1910, 1917, 1937, 1950, 1962, 1977, 1981,-1983, 1986-1990, 1992-1996, and 2001-2007. This information was utilized during the Corridor reconnaissance to correlate historical properties of environmental concern with their current street address, block, and lot information. Based on the Sanborn maps provided, the properties adjoining the Corridor have historically been developed with residences, a park, a storefront, and/or a country club/hotel. No properties of potential environmental concern were identified. Copies of the Sanborn Fire Insurance Maps are provided as Appendix A.

3.3 Regulatory Agency Database Report Review

An environmental database report was obtained from EDR to review available regulatory environmental databases to identify sites that are known to be contaminated or pose potential environmental risk within a 1/8-mile radius of the Corridor centerline. Databases searched 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) Treatment, 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 B.

3.4 Findings and Recommendations of the Phase I CA

Based on the Risk Criteria protocol established by the NYCDDC, LiRo identified six 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 NYSDEC, sites identified on one 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.

After evaluation of the modifying information, no final "High" or "Moderate" risk sites were identified. The Figure that identifies the High and Moderate Risk Sites and the Appendix including the Corridor reconnaissance photographs were not generated.



4.0 PHASE II SCI CORRIDOR EVALUATION

4.1 Soil Quality Investigation

Two borings (SB-01 and SB-02) were advanced to a terminal depth of 17 ftbg. The borings were cleared to a depth of 6 ftbg using a hand auger, post hole digger, and/or a vacuum excavator. Soil samples were collected using disposable spoons. Soil boring locations are shown on Figure 2. The designations and sampling intervals for the samples that were submitted to the laboratory are included in Table 3. Boring logs are provided in Appendix C. The locations of each boring are described below and shown on Figures 3 and 4:

- SB-01 Advanced on the sidewalk along Huguenot Avenue, 76 feet southeast of Chester Avenue and 5 feet southwest of the Huguenot Avenue curb line.
- SB-02 Advanced on the sidewalk along Swaim Street, 103 feet southeast of Chester Avenue and 1 foot northeast of the Swaim Street curb line.

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. In addition, a PID was used to screen the soil for VOC vapors. All re-useable sampling equipment was decontaminated using a deionized water and Alconox soap wash and then rinsed with deionized water.

To identify representative conditions relative to the presence of VOCs, SVOCs, PCBs, pesticides, and metals, grab samples were collected as follows:

- a) the first grab sample was collected from the 0-2 ftbg depth (surface soil) (SB-01 and SB-02);
- b) if no signs of contamination were identified and groundwater was not encountered, the second grab sample was collected from the bottom 6-inch interval of the boring (SB-01 and SB-02).

Composite soil samples were collected by mixing the soil from the entire column in a stainless steel bowl. Boring composite samples were collected from both soil borings. Grab soil samples were collected from the top 2 feet and the bottom 6-inch interval in each soil boring.

4.2 Groundwater Quality Investigation

While two TWPs were proposed to be installed within the Work Plan, groundwater was not encountered within either of the soil borings. Therefore, no TWPs were installed and no groundwater samples were collected.

4.3 Laboratory Analyses

The soil samples were submitted to Chemtech, a NYSDOH approved laboratory (No. 11376). Laboratory analytical reports are included in Appendix D.



Soil samples were collected to comply with the NYCDEP CEQR protocols:

- The collection of four grab soil samples which were analyzed for USEPA TCL VOCs via USEPA Method 8260C, TCL SVOCs via USEPA Method 8270D, PCBs via USEPA Method 3550B/8082, pesticides via USEPA Method 8081, and TAL metals via USEPA 6000/7000 series Methods; and,
- The collection of two composite soil samples which were analyzed for TPHC DRO/GRO, RCRA TCLP RCRA Metals.

Soil QA/QC samples were also collected to comply with the NYCDEP CEQR protocols and submitted for analysis for the following parameters:

- **Soil**: duplicate soil sample (one in total "SB-01-16.5-17.0-DUP") analyzed for TCL VOCs, TCL SVOCs, PCBs, pesticides, and TAL metals. The duplicate sample was collected from the same soil depth interval as one of the soil samples collected; and,
- **Soil**: trip blank (one sample per day, one in total "Trip Blank") analyzed for TCL VOCs. The trip blank includes an unopened water sample prepared by the laboratory which travels with the soil sample bottles from the laboratory to the field and from the field to the laboratory. The trip blank sample and the soil samples were not separated, and remained in the same cooler.

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) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Restricted Use Commercial (Track 2) Soil Cleanup Objectives (SCOs); and/or, (2) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 371.



5.0 PHASE II SCI FINDINGS

This section discusses the analytical data and findings for the activities discussed in Section 4.0. Boring logs can be found in Appendix C. Complete analytical data reports are included in Appendix D.

5.1 Field Screening

Field screening did not identify any visual or olfactory evidence of impacts or elevated PID readings within the soil borings. 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

One VOC, acetone, was detected in two of the four grab soil samples (SB-02-0-2.0 and SB-02-16.5-17.0) collected. This compound was detected at concentrations below the Restricted Use-Commercial (Track 2) SCOs. Acetone is a common laboratory cross-contaminant and is most likely not representative of the subsurface conditions. Refer to Table 4 for a summary of TCL VOC detections.

5.2.2 Semi-Volatile Organic Compounds (SVOCs) in Soil

No SVOCs were detected in the four grab samples collected. Refer to Table 5.

5.2.3 Target Analyte List (TAL) Metals in Soil

Multiple TAL metals, including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium (total), cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, vanadium, and/or zinc, were detected in all four grab soil samples collected. The reported concentrations were all below the applicable Restricted Use-Commercial (Track 2) SCOs. Refer to Table 6 for a summary of TAL metals detections.

5.2.4 Pesticides in Soil

No pesticides were detected within the four grab soil samples collected. Refer to Table 7.

5.2.5 Polychlorinated Biphenyls (PCBs) in Soil

No PCBs were detected in the four grab soil samples collected. Refer to Table 8.

5.2.6 Waste Characterization of Soil

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were within the acceptable RCRA ranges in the two composite samples collected. TCLP RCRA metals were not detected at concentrations exceeding RCRA limits in the two waste characterization soil samples collected. TPHC-DRO were detected at concentrations of 1.270 and 1.060 mg/kg in SB-01-COMP and SB-02-COMP, respectively. TPHC-GRO were not detected in either of the composite samples collected. There are no regulatory standards for TPHC-DRO and TPHC-GRO. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste characterization prior to off-site disposal. Refer to Table 9 for a summary of TCLP parameters, RCRA Characteristics, and TPHC-DRO/GRO results.



5.2.7 Quality Assurance/Quality Control Data

One duplicate soil sample (SB-01-16.5-17.0-DUP) was collected from soil boring SB-01 and analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, and PCBs. The results for the duplicate sample were generally consistent with those detected within the primary soil sample. However, two pesticides, 4,4'-DDE and 4,4'-DDT, were detected within the duplicate sample but not the primary sample. Soil duplicate results are provided in Tables 4 through 8.

One VOC, methylene chloride, was reported within the trip blank sample (Trip Blank) submitted for analysis (Table 4). Methylene chloride is a common laboratory cross-contaminant.



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 (i.e., PID readings and visual and olfactory observations) did not identify any petroleum-impacted soils within the Corridor;
- Laboratory analytical results did not identify sampled parameters exceeding the NYSDEC Restricted Use Commercial SCOs in the two composite sample;
- Laboratory analytical results did not identify petroleum-impacted soils throughout the Corridor;
- The subsurface soil samples collected from the Corridor did not exhibit hazardous waste characteristics; and,
- Since groundwater was not encountered, no groundwater samples were collected.

Based on the results of the field investigation and laboratory analytical results, LiRo recommends the following:

- The Contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of non-hazardous contaminated soil. All soil shall be managed, transported and disposed of in accordance with NYSDEC Part 360 requirements. The Contractor should submit a Material Handling Plan, to identify the specific protocols and procedures that will be employed to manage potentially contaminated waste, if encountered, during construction, in accordance with applicable regulations;
- Due to the presence of TPH DRO in the investigated Corridor, to minimize the creation and dispersion of fugitive airborne dust, the Contractor may implement dust control measures to minimize potential airborne contaminants released as a direct result of construction activities. A CAMP shall be developed in accordance with NYSDEC DER-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities;
- Should dewatering become necessary during construction activities within the Corridor, the
 Contractor will be required to obtain a NYCDEP sewer discharge permit. If discharge into storm
 sewers is required during dewatering, it may be done under the appropriate NYSDEC 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 Corridor-specific HASP that will meet the requirements set forth by the OSHA, the NYSDOH and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns (i.e., dust control procedures for TPH 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 F). Qualifications of the Environmental Professionals associated with this project are included within Appendix E.

| Report Prepa | red By: |
|--------------|---------|
|--------------|---------|

Amy Hewson

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Report Reviewed By:

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Report Reviewed By:

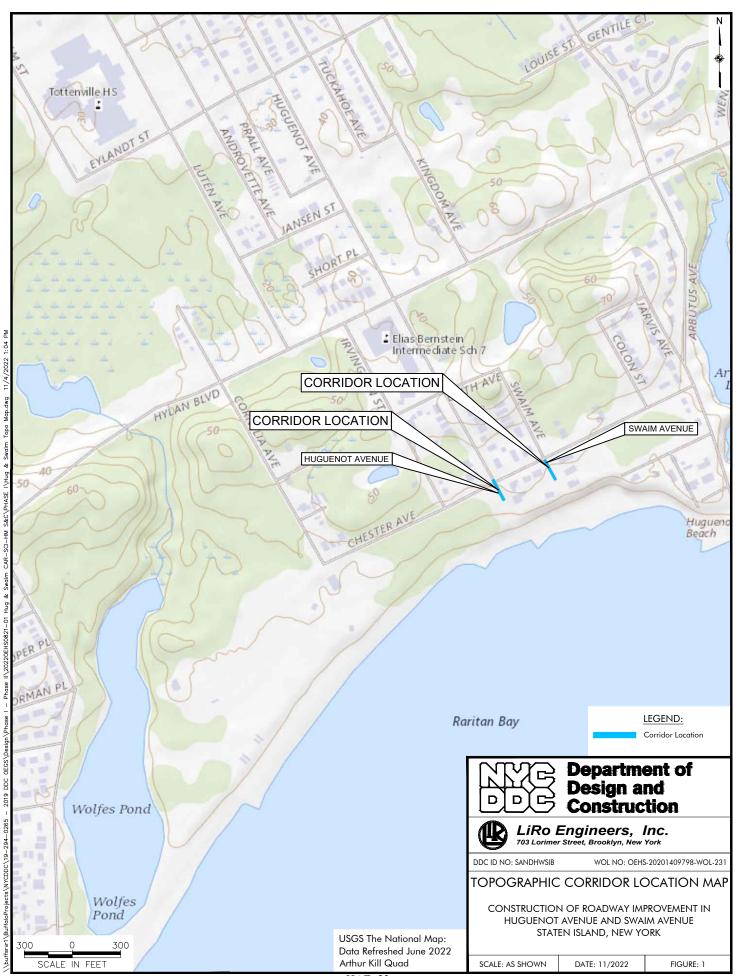
Robert Kreuzer Project Manager

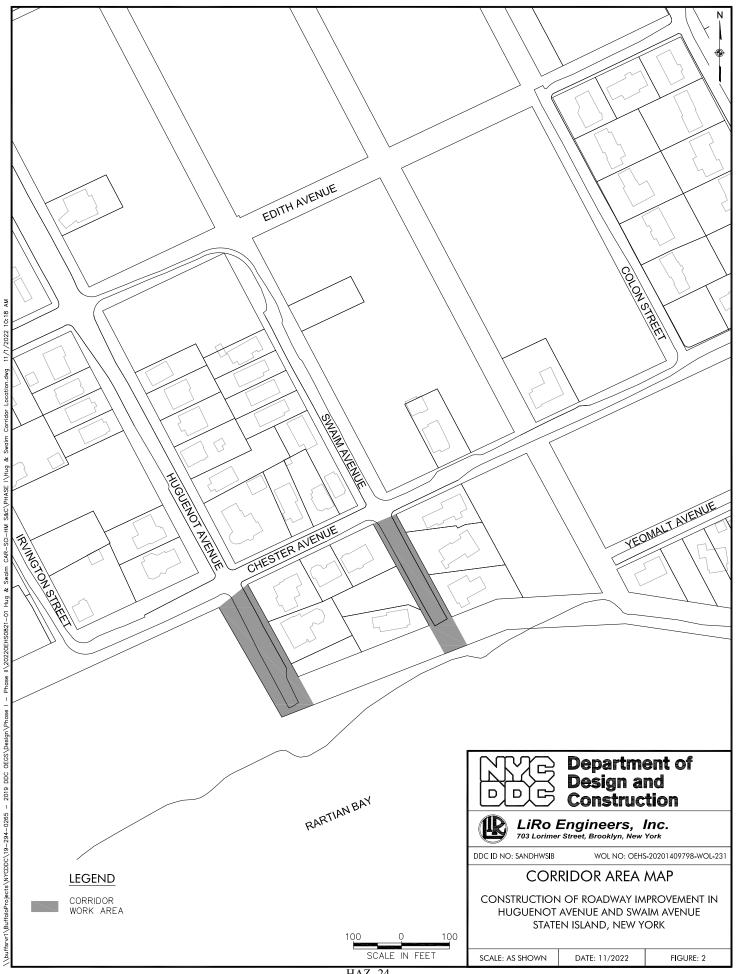


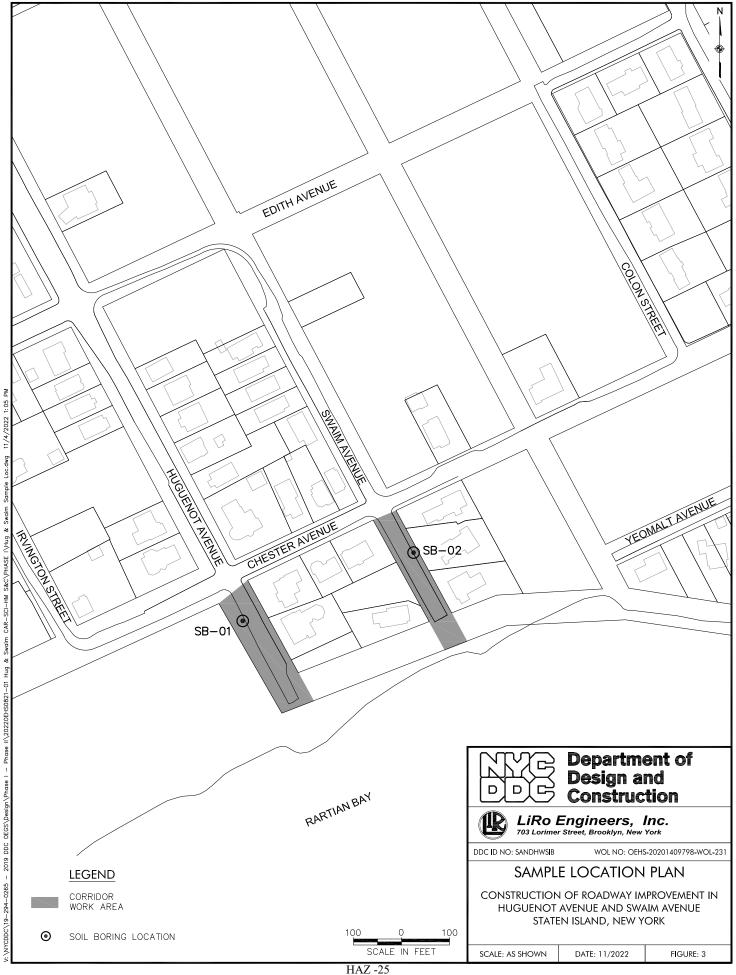
FIGURES

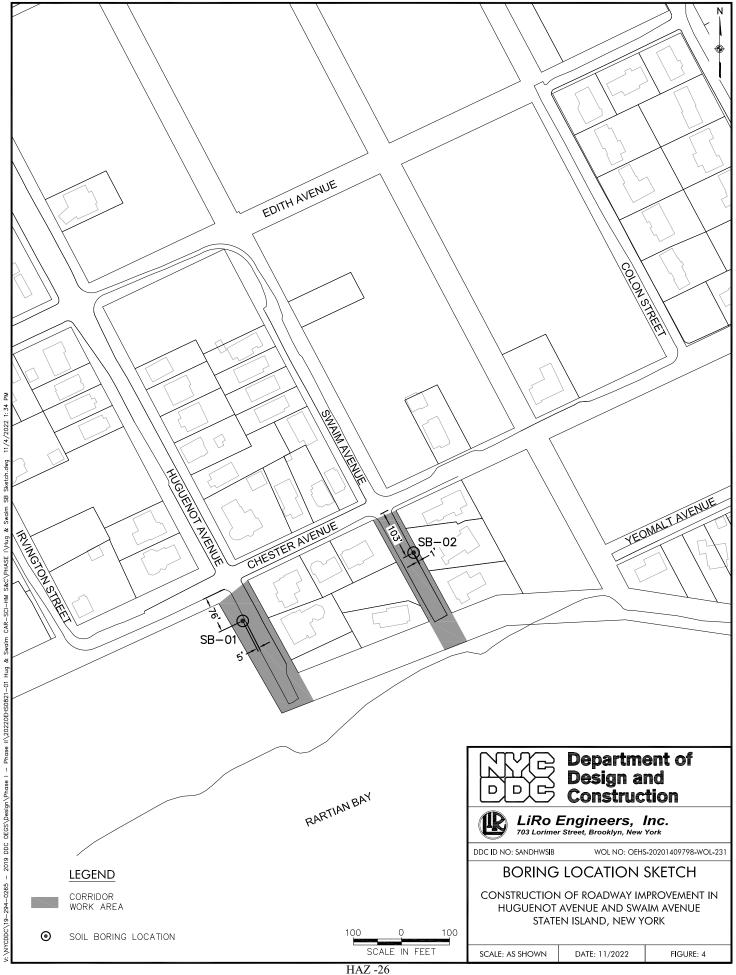
FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP FIGURE 2 – CORRIDOR AREA MAP FIGURES 3 – SAMPLE LOCATION PLAN FIGURES 4 – BORING LOCATION SKETCH

LiRo Engineers, Inc. DDC CAPIS ID No. SANDHWSIB December 13, 2022











TABLES

TABLE 1 - NYCDDC SPECIFIC RISK CRITERIA

TABLE 2 - SUMMARY OF ASSESSMENT RESULTS

TABLE 3 - SUMMARY OF ENVIRONMENTAL BORING DATA

TABLE 4 - SUMMARY OF TARGET COMPOUND LIST (TCL)

VOLATILE ORGANIC COMPOUNDS (VOCS) DETECTED IN SOIL

TABLE 5 - SUMMARY OF TARGET COMPOUND LIST (TCL) SEMIVOLATILE 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 POLYCHLORINATED BIPHENYLS (PCBS)

DETECTED IN SOIL

TABLE 9 - SUMMARY OF WASTE CHARACTERIZATION IN SOIL

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TABLE 1. NYCDDC SPECIFIC RISK CRITERIA

| Risk
Category | Land Use |
|------------------|--|
| | REGULATORY AGENCY DATABASE |
| | • 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) |
| | HISTORICAL SANBORN MAP REVIEW AND SITE RECONNAISSANCE |
| HIGH | • 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). |
| | Hospitals, clinics, doctor's offices |
| | • Construction activities (i.e., highway and street construction, wrecking and demolition work) |
| MODERATE | 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.) |
| | • Retail buildings, restaurants, etc. |
| T CYY | • Private residences, apartment buildings |
| LOW | • 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.

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

TABLE 2 SUMMARY OF ASSESSMENT RESULTS FOR THE CONSTRUCTION OF ROADWAY IMPROVEMENTS IN HUGUENOT AVENUE AND SWAIM AVENUE STATEN ISLAND, NEW YORK

| DDC Project No. SANDHWSIB |
|---|
| Work Order No. OEHS-20201409798-WOL-231 |

|--|

MODERATE RISK SITE

No high or moderate risk sites were identified.



Table 3. Summary of Environmental Boring Data

| Boring No. | Sample ID | PID
(ppm) | Sample
Interval
(ftbg) | Total
VOCs
(ug/kg) | Total
SVOCs
(ug/kg) | Metals
Exceedances
(Yes/No) | Total
Pestices
(ug/kg) | Total
PCBs
(ug/kg) | Depth to
Water
(ftbg) | Total
Depth
(ftbg) | Other Comments | |
|------------|-----------------|--------------|------------------------------|--------------------------|---------------------------|-----------------------------------|------------------------------|--------------------------|-----------------------------|--------------------------|--|--|
| SB-01 | SB-01-0-2.0 | <1 | 0-2.0 | ND | ND | No | ND | ND | Not encountered | 17.0 | No petroleum odors, visual evidence or impact, or elevated | |
| | SB-01-16.5-17.0 | | 16.5-17.0 | ND | ND | No | ND | ND | | | PID readings were detected. | |
| | SB-01-COMP | | 0-17.0 | NA | NA | NA | NA | NA | | | | |
| | SB-02-0-2.0 | <1 | 0-2.0 | 15 | ND | No | ND | ND | Not encountered | Net | | No petroleum odors, visual evidence or impact, or elevated |
| SB-02 | SB-02-16.5-17.0 | | 16.5-17.0 | 13 | ND | No | ND | ND | | 17.0 | PID readings were detected. | |
| | SB-02-COMP | | 0-17.0 | NA | NA | NA | NA | NA | | | FID readings were detected. | |

Notes

All grab samples were analyzed for Target Compound Liust (TCL) Volatile Organic Compounds (VOCs). All composite soil samples were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), TCL Polychlorinated Biphenyls (PCBs), Total Petroleum Hydrocarbon (TPHC) Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO), Resource Conservation and Recovery Act (RCRA) Characteristics, and Toxicity Characteristic Leaching Procedure (TCLP) RCRA Metals.

NA = Not Analyzed/Not Applicable

ND = Non detect

ftbg = feet below grade surface

ppm = parts per million (or mg/kg)

ug/kg = microgram per kilogram

LiRo Engineers, Inc.

13-Dec-22

DDC CAPIS ID No.: SANDHWSIB



Table 4. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil

| | Part 375-6.8 (b)
Restricted Use (Track 2) | Sample ID, Date Collected, and Depth (ftbg) | | | | | | | |
|--------------------|--|---|-----------------|---------------------|-------------|-------------------|----------------|--|--|
| TCL VOC | Commercial Soil Cleanup | SB-01-0-2.0 | SB-01-16.5-17.0 | SB-01-16.5-17.0-DUP | SB-02-0-2.0 | SB-02-16.5-17.0RE | TRIP BLANK | | |
| | Objectives (SCOs) | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | | |
| | Objectives (GGGs) | 0-2.0 | 16.5-17.0 | 16.5-17.0 | 0-2.0 | 16.5-17.0 | Not applicable | | |
| Acetone | 500,000 | ND | ND | ND | 15.4 J | 12.9 J | ND | | |
| Methylene chloride | 500,000 | ND | ND | ND | ND | ND | 0.34 J | | |
| Total VOCs | NS | ND | ND | ND | 15 | 13 | 13 | | |

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ftbg = feet below grade surface

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

J = Estimated value

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

LiRo Engineers, Inc.



Table 5. Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Soil

| | Part 375-6.8 (b) Restricted
Use (Track 1) Commercial | Sample ID, Date Collect, and Depth (ftbg) | | | | | | |
|-------------|---|---|-------------------------------|-----------------------------------|---------------------------|-------------------------------|--|--|
| TCL SVOC | Soil Cleanup Objectives
(SCOs) | SB-01-0-2.0
10/27/2022 | SB-01-16.5-17.0
10/27/2022 | SB-01-16.5-17.0-DUP
10/27/2022 | SB-02-0-2.0
10/27/2022 | SB-02-16.5-17.0
10/27/2022 | | |
| | (3005) | 0-2.0 | 16.5-17.0 | 16.5-17.0 | 0-2.0 | 16.5-17.0 | | |
| Total SVOCs | NS | ND | ND | ND | ND | ND | | |

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ftbg = 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).

LiRo Engineers, Inc.



Table 6. Summary of Target Analyte List (TAL) Metals Detected in Soil

| Toward Analysis Link | Part 375-6.8 (b) Restricted | Sample ID, Date Collect, and Depth (ftbg) | | | | | | | |
|-------------------------------|---|---|-----------------|---------------------|-------------|-----------------|--|--|--|
| Target Analyte List
Metals | Use (Track 1) Commercial
Soil Cleanup Objectives | SB-01-0-2.0 | SB-01-16.5-17.0 | SB-01-16.5-17.0-DUP | SB-02-0-2.0 | SB-02-16.5-17.0 | | | |
| Wietais | (SCOs) | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | | | |
| | (SCOS) | 0-2.0 | 16.5-17.0 | 16.5-17.0 | 0-2.0 | 16.5-17.0 | | | |
| Aluminum | NS | 3,040 | 3,830 | 3,050 | 3,510 | 3,600 | | | |
| Antimony | NS | 0.44 JN | 0.58 JN | 0.58 JN | 0.69 JN | 0.61 JN | | | |
| Arsenic | 16 | 0.71 JN | 2.21 N | 1.02 N | 2.70 N | 1.55 N | | | |
| Barium | 400 | 84.1 | 126 | 84.2 | 85.1 | 78.0 | | | |
| Beryllium | 590 | 0.41 | 0.52 | 0.43 | 0.67 | 0.53 | | | |
| Cadmium | 9.3 | 0.081 J | 0.17 J | 0.12 J | 0.28 J | 0.17 J | | | |
| Calcium | NS | 773 | 1,160 | 791 | 1,010 | 2,860 | | | |
| Chromium (total) | 1,500 | 6.99 | 9.33 | 7.43 | 10.9 | 13.6 | | | |
| Cobalt | NS | 4.99 N | 8.60 N | 5.19 N | 10.6 N | 6.86 N | | | |
| Copper | 270 | 8.12 | 10.1 | 7.60 | 10.4 | 11.4 | | | |
| Iron | NS | 13,200 | 16,300 | 14,300 | 18,200 | 17,500 | | | |
| Lead | 1,000 | 5.49 | 7.69 | 6.32 | 10.2 | 8.61 | | | |
| Magnesium | NS | 2,170 | 2,860 | 1,990 | 2,220 | 2,130 | | | |
| Manganese | 10,000 | 342 | 466 | 324 | 681 | 284 | | | |
| Mercury | 2.8 | 0.026 | 0.027 | 0.021 | 0.028 | 0.023 | | | |
| Nickel | 310 | 10.2 N | 15.4 N | 10.2 N | 22.5 N | 13.3 N | | | |
| Potassium | NS | 545 | 733 | 561 | 669 | 669 | | | |
| Selenium | 1,500 | ND | ND | ND | 0.52 JN | 0.80 JN | | | |
| Silver | 1,500 | 0.16 J | 0.18 J | 0.15 J | 0.18 J | 0.17 J | | | |
| Sodium | NS | 127 | 165 | 118 | 150 | 142 | | | |
| Vanadium | NS | 11.9 | 15.9 | 13.4 | 17.7 | 16.6 | | | |
| Zinc | 10,000 | 22.6 N | 29.0 N | 22.1 N | 35.2 N | 27.4 N | | | |

Notes:

All concentrations are in parts per million (ppm or mg/kg)

ftbg = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

N = Presumative evidence of a compound

J = Esimated value

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

LiRo Engineers, Inc. 13-Dec-22

DDC CAPIS ID No.: SANDHWSIB



Table 7. Summary of Pesticides Detected in Soil

| | Part 375-6.8 (b)
Restricted Use (Track | Sample ID, Date Collect, and Depth (ftbg) | | | | |
|------------------|---|---|-----------------|---------------------|-------------|-----------------|
| Pesticide | 1) Commercial Soil | SB-01-0-2.0 | SB-01-16.5-17.0 | SB-01-16.5-17.0-DUP | SB-02-0-2.0 | SB-02-16.5-17.0 |
| | Cleanup Objectives | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 |
| | (SCOs) | 0-2.0 | 16.5-17.0 | 16.5-17.0 | 0-2.0 | 16.5-17.0 |
| 4,4'-DDE | 62,000 | ND | ND | 1.10 J | ND | ND |
| 4,4'-DDT | 47,000 | ND | ND | 1.30 JP | ND | ND |
| Total Pesticides | NS | ND | ND | 2 | ND | ND |

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ftbg = feet below grade surface

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

J = Esimated value

P = Indicates >25% difference for detected concentrations between the two GC columns

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006).

LiRo Engineers, Inc. 13-Dec-22



Table 8. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil

| | Part 375-6.8 (b) Restricted
Use (Track 2) Commercial
Soil Cleanup Objectives
(SCOs) | , , , , , , , , , , , , , , , , , , , | | | | |
|------------|--|---------------------------------------|-----------------|---------------------|-------------|-----------------|
| | | SB-01-0-2.0 | SB-01-16.5-17.0 | SB-01-16.5-17.0-DUP | SB-02-0-2.0 | SB-02-16.5-17.0 |
| | | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 | 10/27/2022 |
| | | 0-2.0 | 16.5-17.0 | 16.5-17.0 | 0-2.0 | 16.5-17.0 |
| Total PCBs | 1,000 | ND | ND | ND | ND | ND |

Notes:

All concentrations are reported in parts per billion (ppb or ug/kg)

ftbg = feet below grade surface

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).

LiRo Engineers, Inc. 13-Dec-22



Table 9. Summary of Waste Characterization in Soil

| | 6 NYCRR Part 371 | Sample ID, Date Collected, and Depth (ftbg) | | |
|---------------------------------------|------------------|---|------------------------------------|--|
| Parameter | and RCRA | SB-01-COMP
10/27/2022
0-17.0 | SB-02-COMP
10/27/2022
0-17.0 | |
| METALs ¹ | ug/L | | | |
| Barium | 100,000 | 2,060 | 2,980 | |
| Chromium | 5,000 | 33.7 J | 130 | |
| MISC. PARAMETERS (units) | | | | |
| Reactivity Sulfide (mg/kg) | 500 | ND | ND | |
| Reactivity Cyanide (mg/kg) | 250 | ND | ND | |
| pH (SU) | 2-12.5 | 8.70 H | 8.68 H | |
| Ignitability | >140 °F | No | No | |
| TPHC Diesel Range Organics (mg/kg) | NS | 1.270 J | 1.060 J | |
| TPHC Gasoiline Range Organics (mg/kg) | NS | ND | ND | |

Notes:

ftbg = 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

J = Estimated value

H = Sample analysis out of hold time

mg/Kg = milligram per kilogram

ug/L = microgram per liter

1 = TCLP RCRA Metals

LiRo Engineers, Inc. 13-Dec-22



APPENDIX A SANBORN FIRE INSURANCE MAPS

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Construction of Roadway Improvement
Huguenot Ave. & Swaim Ave. bw Sore & Chester Aves.
Staten Island, NY 10312

Inquiry Number: 7076628.5

August 04, 2022

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

08/04/22

Site Name:

Client Name:

Construction of Roadway Impro Huguenot Ave. & Swaim Ave. t Staten Island, NY 10312 EDR Inquiry # 7076628.5

The LiRo Group 690 Delaware Avenue Buffalo, NY 14209 Contact: Amy Hewson



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1917

1910

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OEHS **Project**

Maps Provided:

| 2007 | 1995 | 1986 |
|------|------|------|
| 2006 | 1994 | 1983 |
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| 2004 | 1992 | 1981 |
| 2003 | 1990 | 1977 |
| 2002 | 1989 | 1962 |
| 2001 | 1988 | 1950 |
| 1996 | 1987 | 1937 |



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2007 Source Sheets



Volume 5, Sheet 508 2007

2006 Source Sheets



Volume 5, Sheet 508 2006

2005 Source Sheets



Volume 5, Sheet 508 2005



Volume 5, Sheet 508 2004

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



2003 Source Sheets



Volume 5, Sheet 508 2003

2002 Source Sheets



Volume 5, Sheet 508 2002

2001 Source Sheets



Volume 5, Sheet 508 2001



Volume 5, Sheet 508 1996

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1995 Source Sheets



Volume 5, Sheet 508 1995

1994 Source Sheets



Volume 5, Sheet 508

1993 Source Sheets



Volume 5, Sheet 508 1993



Volume 5, Sheet 508 1992

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1990 Source Sheets



Volume 5, Sheet 508 1990

1989 Source Sheets



Volume 5, Sheet 508 1989

1988 Source Sheets



Volume 5, Sheet 508 1988



Volume 5, Sheet 508 1987

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1986 Source Sheets



Volume 5, Sheet 508 1986

1983 Source Sheets



Volume 5, Sheet 508 1983

1982 Source Sheets



Volume 5, Sheet 508 1982



Volume 5, Sheet 508 1981

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1977 Source Sheets



Volume 5, Sheet 508 1977

1962 Source Sheets



Volume 5, Sheet 508 1962

1950 Source Sheets



Volume 5, Sheet 508 1950



Volume 5, Sheet 508 1937

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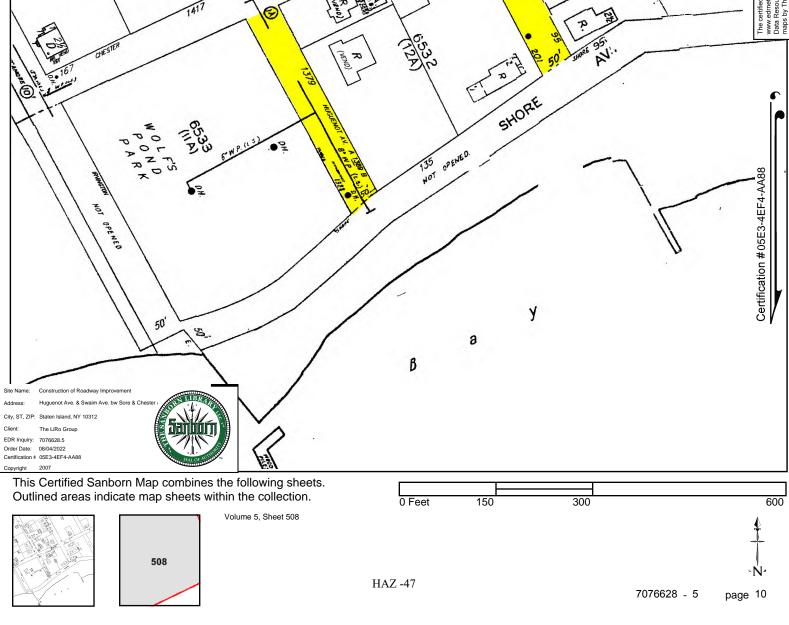
1917 Source Sheets



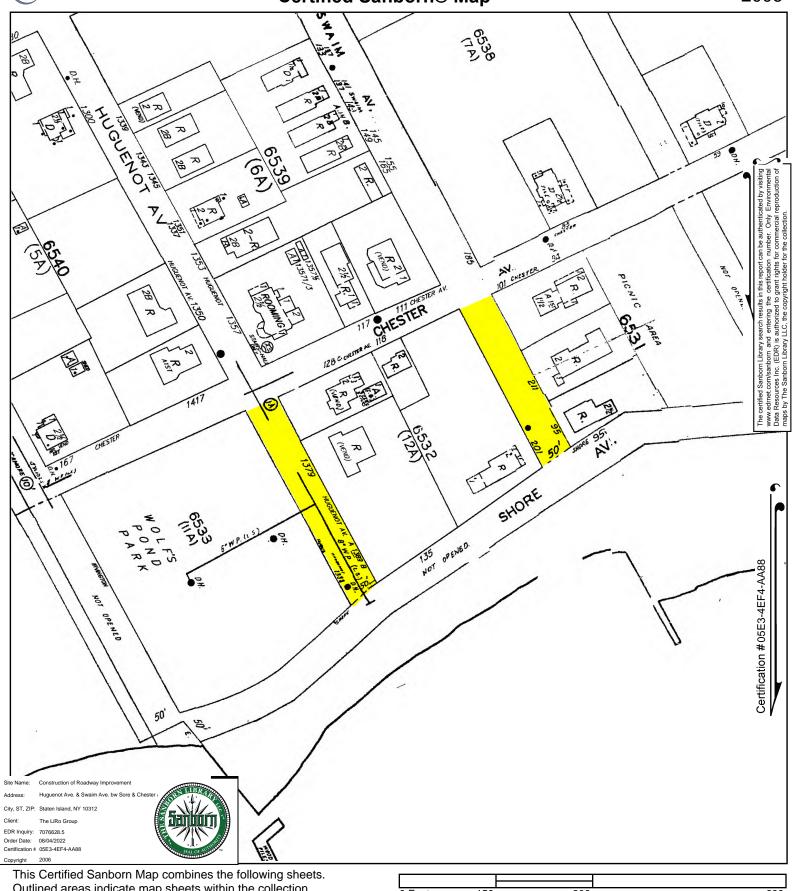
Volume 2, Sheet 178 1917

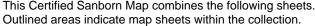


Volume 1, Sheet 133 1910





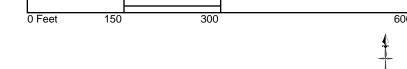






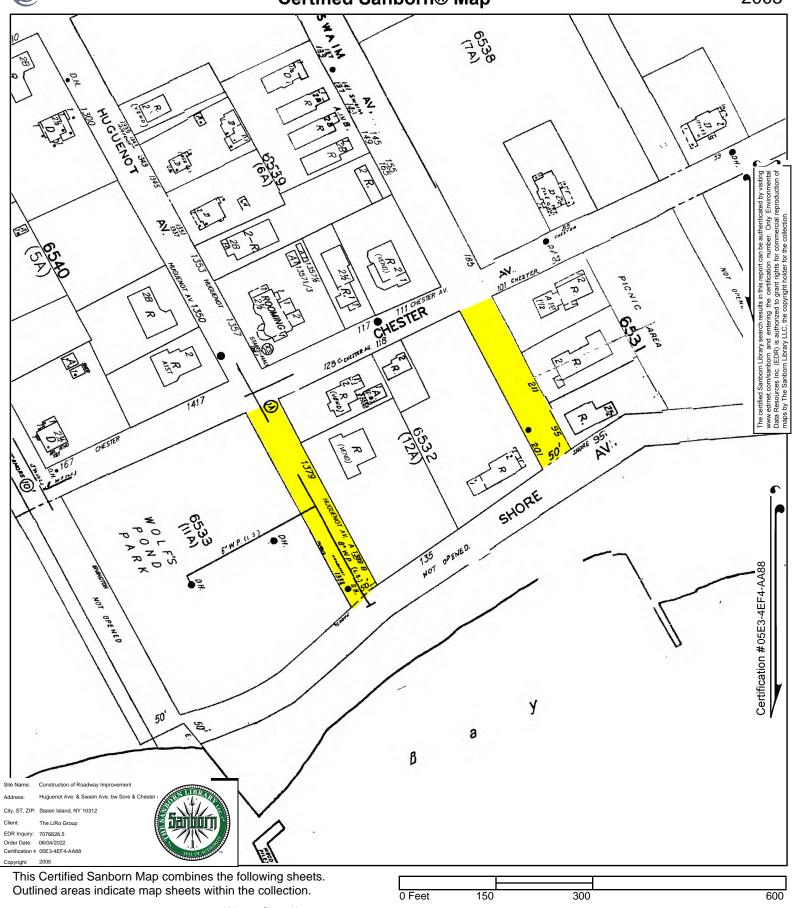


Volume 5, Sheet 508

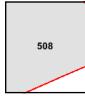


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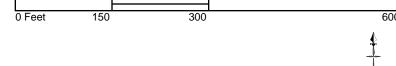








Volume 5, Sheet 508

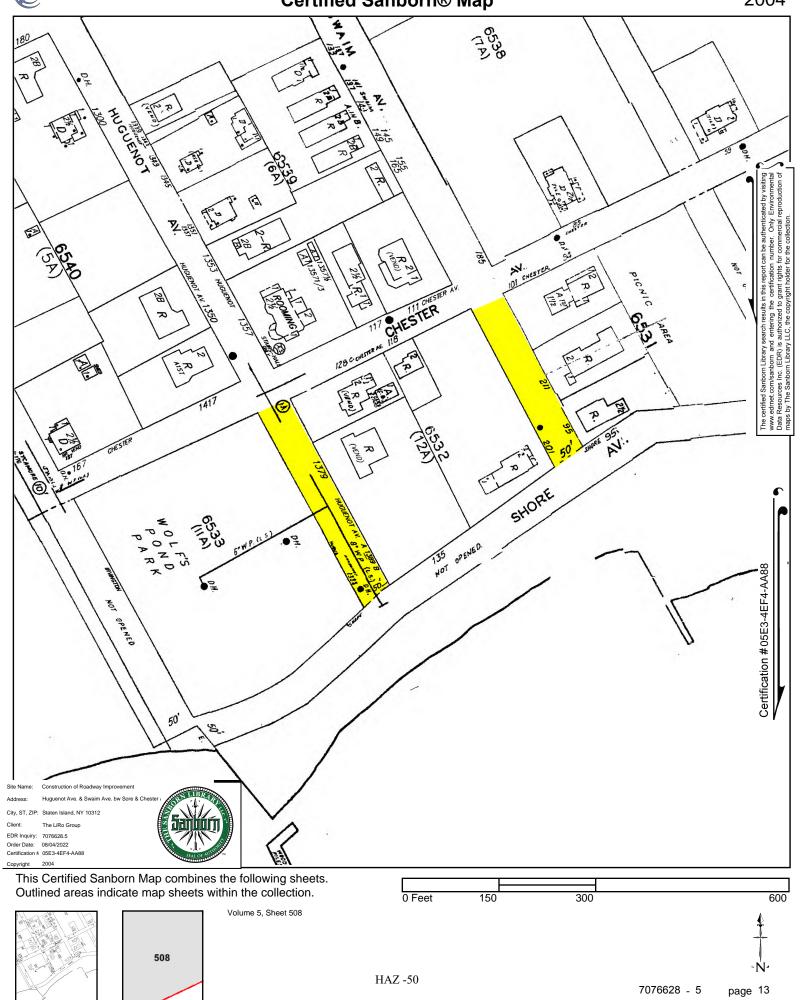


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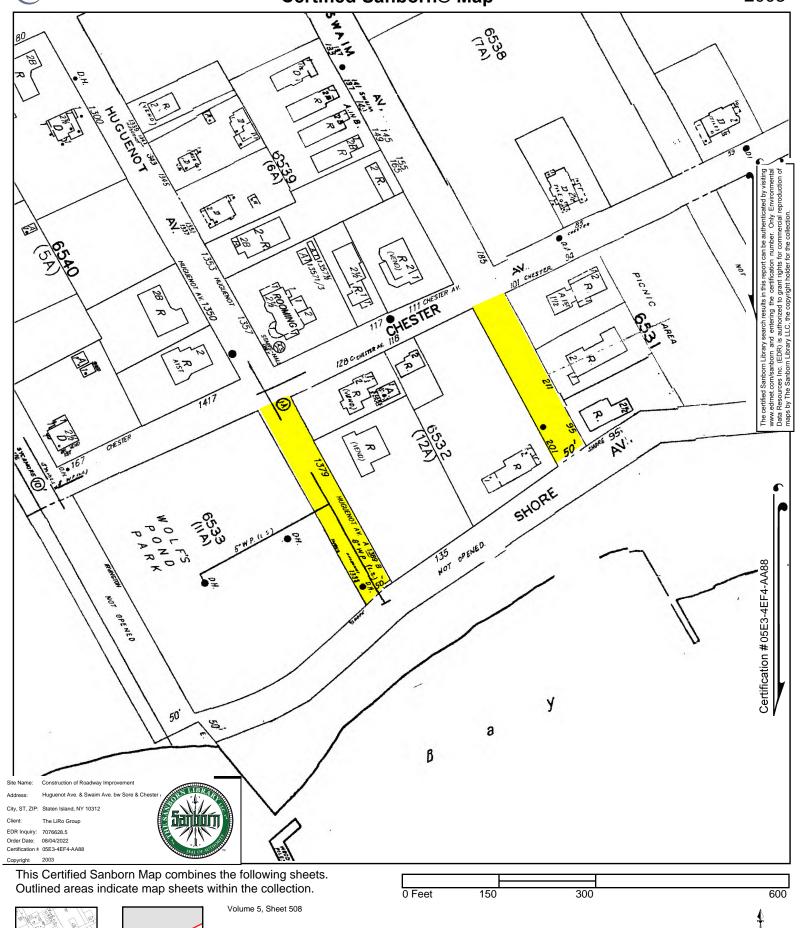








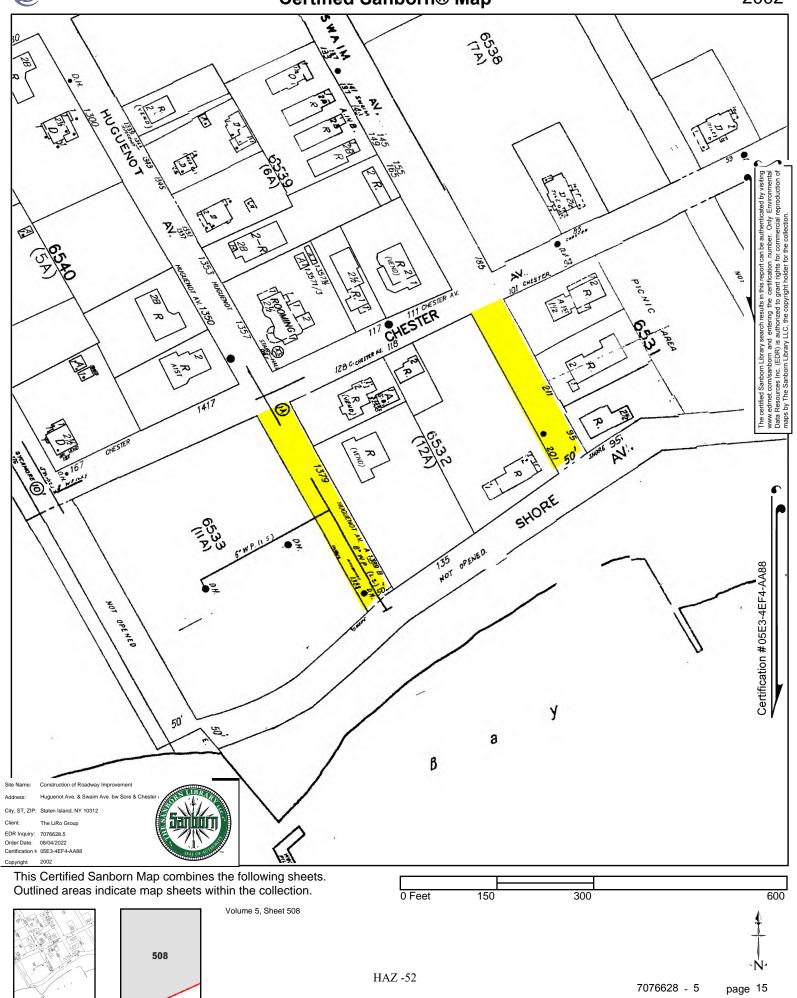
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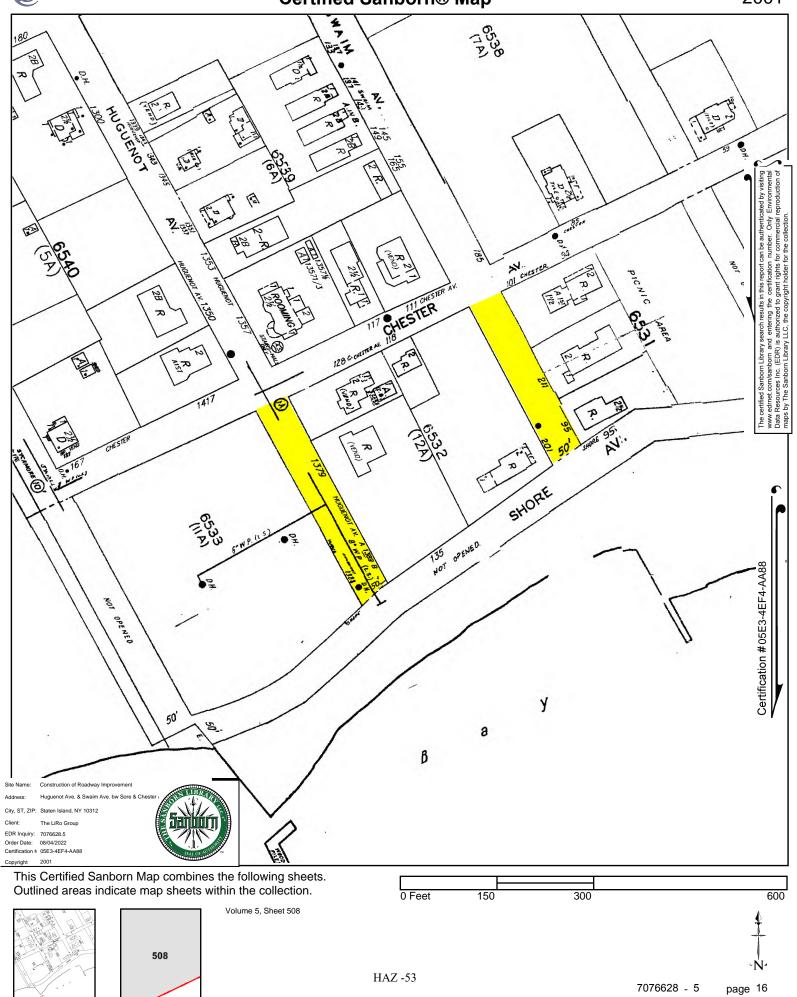










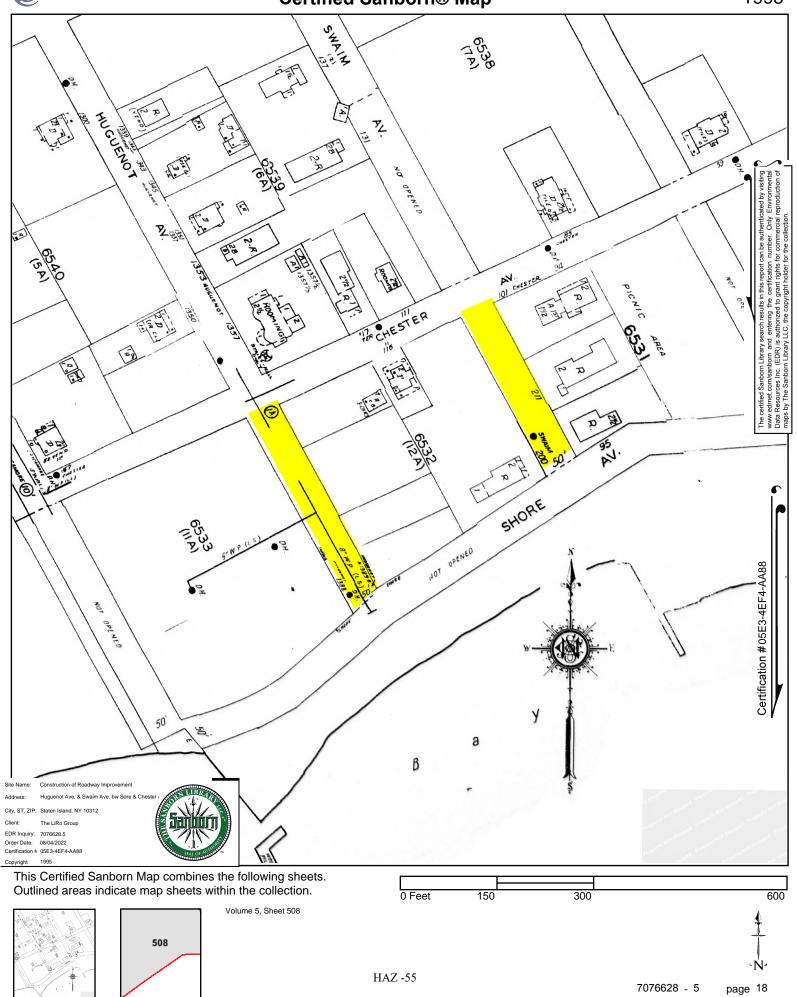


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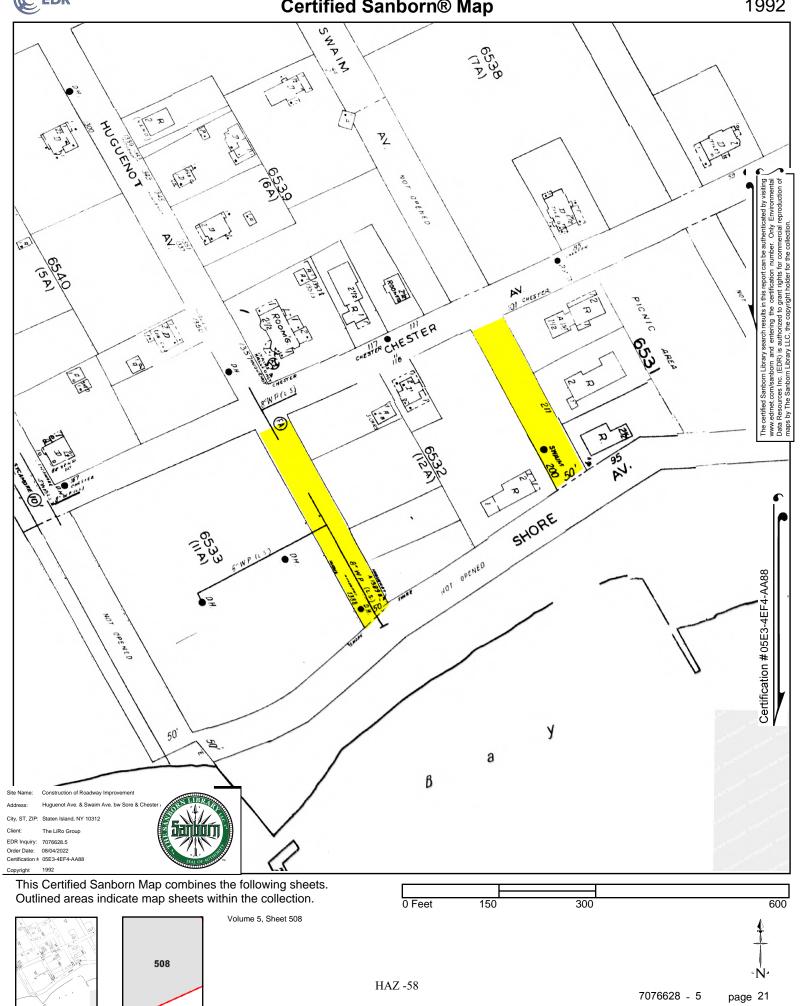


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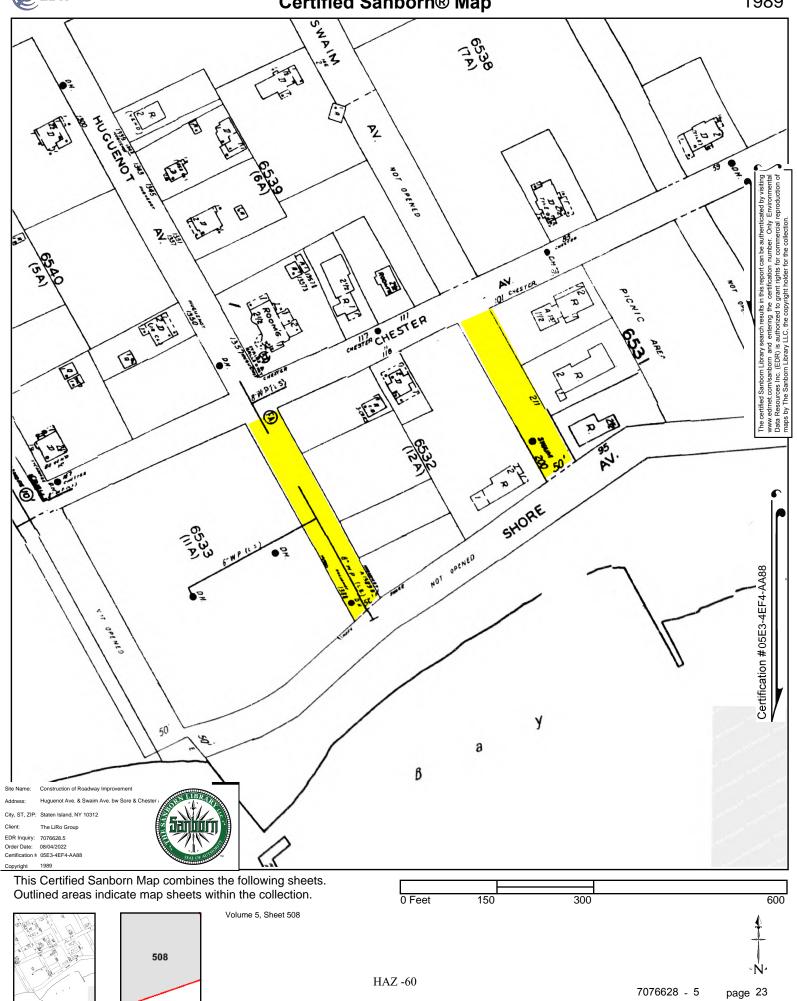
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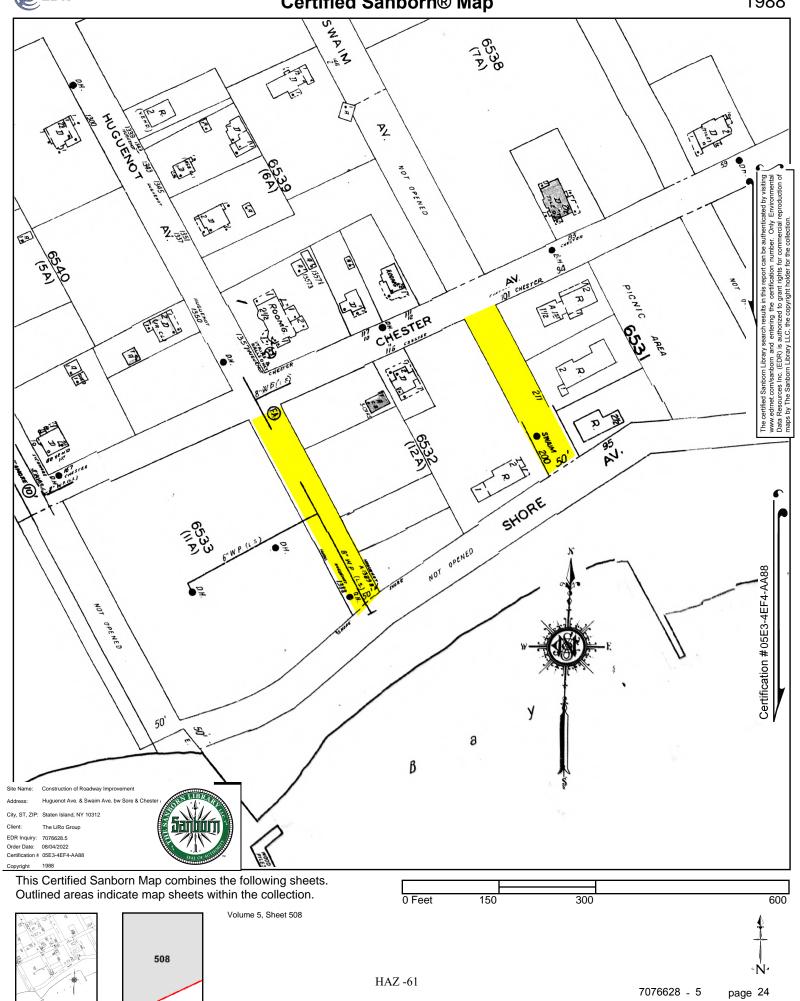










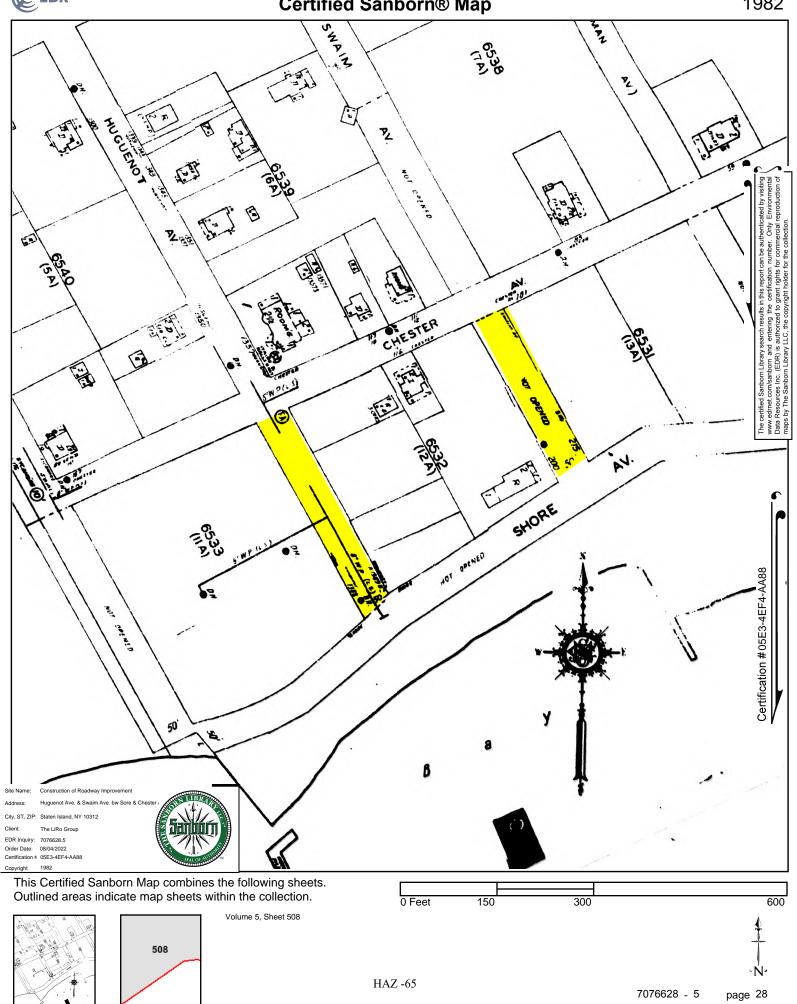


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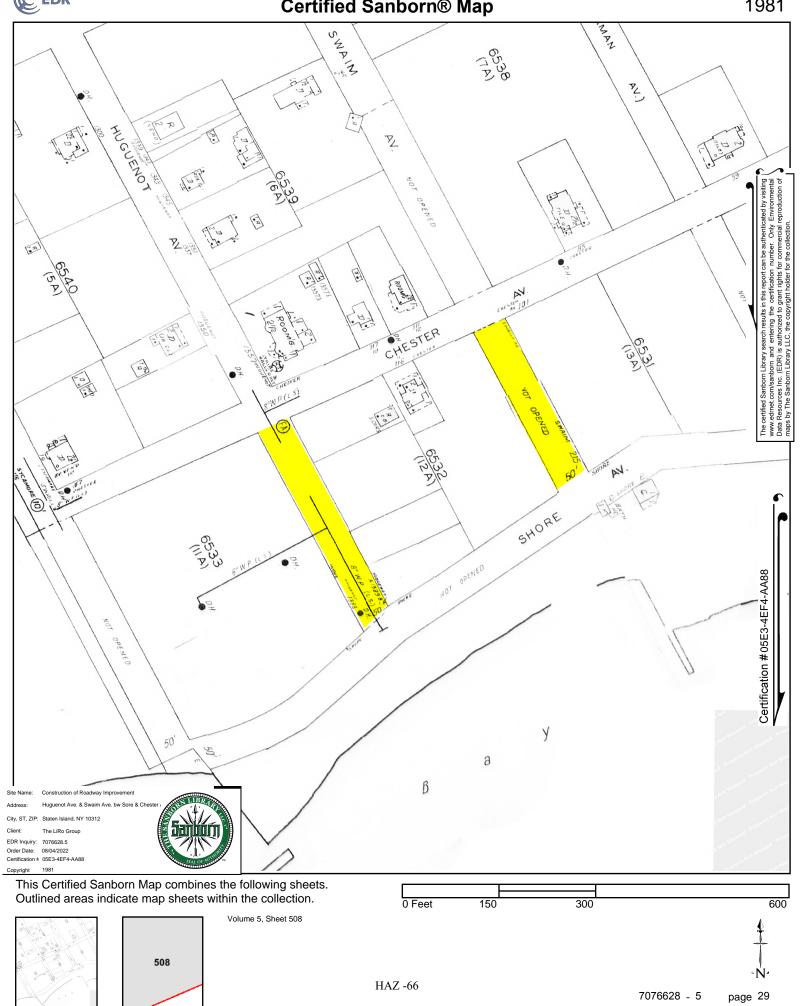
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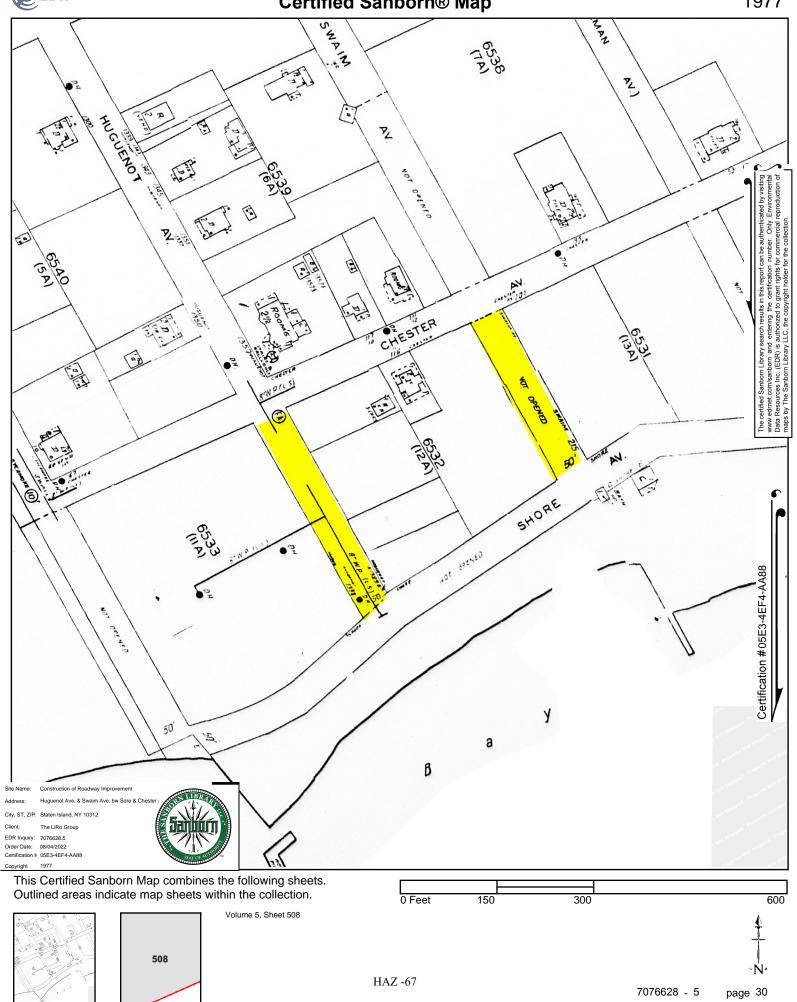






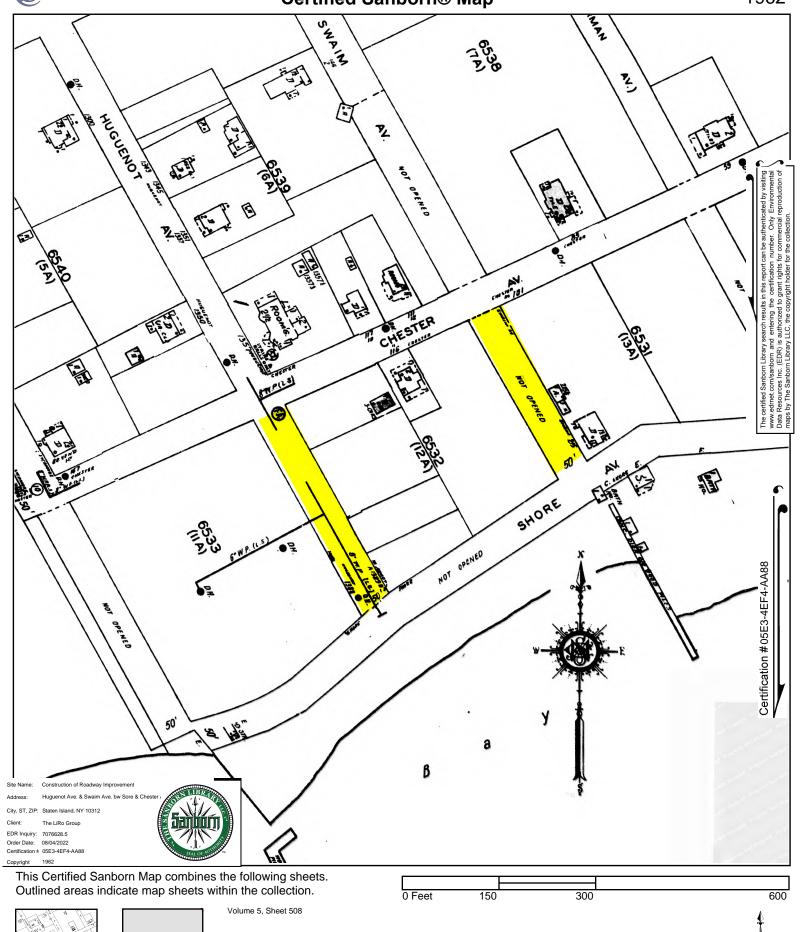












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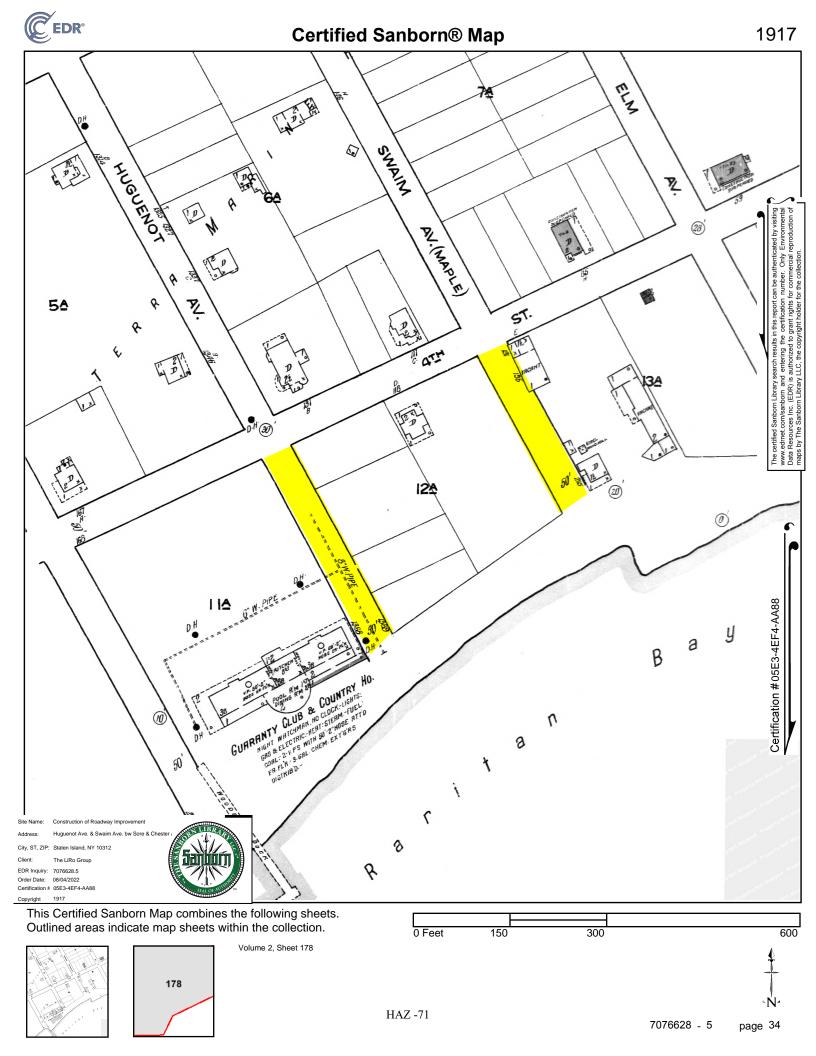


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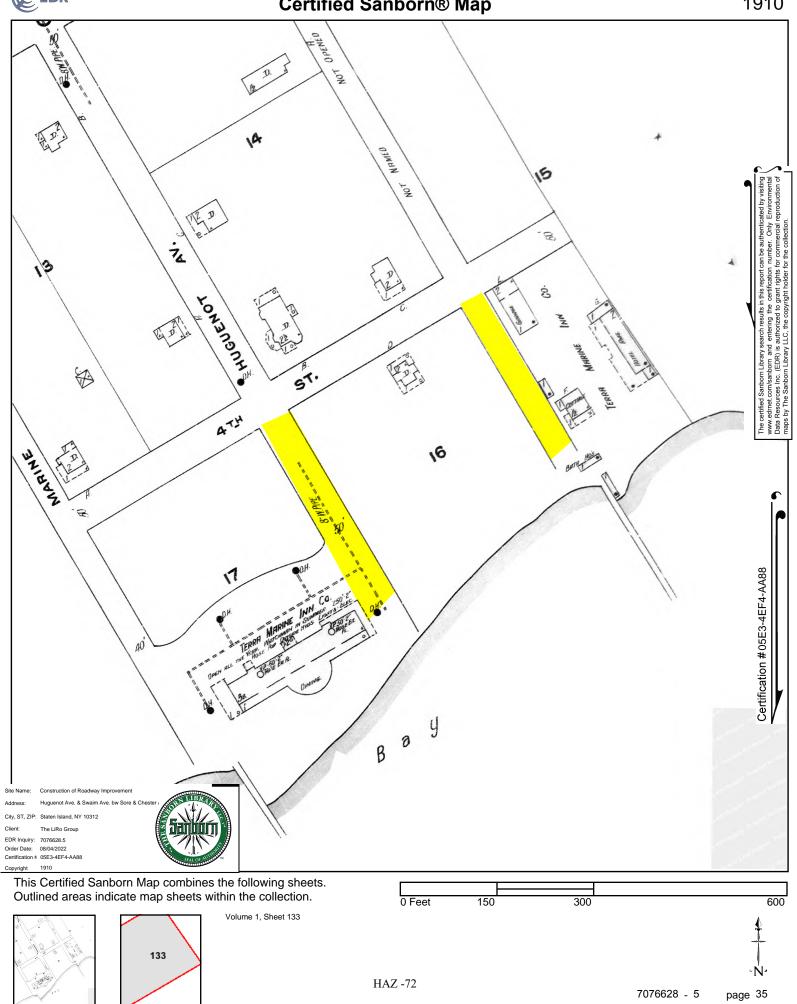
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APPENDIX B REGULATORY AGENCY DATABASE REPORT

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Work Order Letter No.OEHS-20201409798-WOL-231

Construction of Roadway Improvement

Huguenot Ave. & Swaim Ave. bw Sore & Chester Aves. Staten Island, NY 10312

Inquiry Number: 7076628.2s

August 04, 2022

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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| Orphan Summary | 35 |
| 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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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 (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

HUGUENOT AVE. & SWAIM AVE. BW SORE & CHESTER AVES. STATEN ISLAND, NY 10312

COORDINATES

Latitude (North): 40.5206940 - 40³¹ 14.49" Longitude (West): 74.1830580 - 74¹⁰ 10' 59.00"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 569203.6 UTM Y (Meters): 4485661.5

Elevation: 29 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 14071944 ARTHUR KILL, NY

Version Date: 2019

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150729, 20150522

Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
HUGUENOT AVE. & SWAIM AVE. BW SORE & CHESTER AVES.
STATEN ISLAND, NY 10312

Click on Map ID to see full detail.

| MAP | | | | RELATIVE | DIST (ft. & mi.) |
|-----|----------------------|----------------------|--------------------------|-----------|------------------|
| ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | ELEVATION | DIRECTION |
| A1 | STEWARTS SERVICE STA | 1357 HUGUENOT AVE | EDR Hist Auto | Higher | 96, 0.018, NW |
| A2 | 1350 HUGUENOT AVE | 1350 HUGUENOT AVENUE | NY Spills | Higher | 172, 0.033, WNW |
| B3 | INTERMEDIATE SCHOOL | 1270 HUGUENOT AVENUE | LTANKS, SPDES | Higher | 1107, 0.210, NW |
| B4 | PUBLIC SCHOOL 7 - ST | 1270 HUGUENOT AVENUE | AST | Higher | 1107, 0.210, NW |
| B5 | NYC DEPT OF EDUCATIO | 1270 HUGUENOT AVE | RCRA-SQG, MANIFEST, LEAD | Higher | 1107, 0.210, NW |
| B6 | NYCP&R - PRESCOTT PA | HUGUENOT AVE & HYLAN | RCRA-SQG, MANIFEST | Higher | 1292, 0.245, NW |
| 7 | 3554 HYLAN BLVD/ST J | 5150 HYLAN BLVD | LTANKS | Lower | 2176, 0.412, NE |
| 8 | ALLIED PRINCE'S BAY | SEGUINE AVENUE & JOH | SHWS | Lower | 4673, 0.885, SW |
| 9 | ALLIED PRINCE'S BAY | | DEL SHWS | Lower | 4912, 0.930, SW |

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

| Lists of Federal NPL (Supe | rfund) sites |
|------------------------------|---|
| NPL | . National Priority List |
| | Proposed National Priority List Sites |
| NPL LIENS | Federal Superfund Liens |
| Lists of Federal Delisted N | PL sites |
| Delisted NPL | National Priority List Deletions |
| Lists of Federal sites subje | ect to CERCLA removals and CERCLA orders |
| FEDERAL FACILITY | Federal Facility Site Information listing |
| | Superfund Enterprise Management System |
| Lists of Federal CERCLA s | ites with NFRAP |
| SEMS-ARCHIVE | _ Superfund Enterprise Management System Archive |
| Lists of Federal RCRA facil | lities undergoing Corrective Action |
| CORRACTS | Corrective Action Report |
| Lists of Federal RCRA TSD |) facilities |
| RCRA-TSDF | RCRA - Treatment, Storage and Disposal |
| Lists of Federal RCRA gen | erators |
| RCRA-LQG | _ RCRA - Large Quantity Generators |
| RCRA-VSQG | RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators) |
| Federal institutional contro | ols / engineering controls registries |
| | |

LUCIS_____Land Use Control Information System US ENG CONTROLS_____Engineering Controls Sites List

US INST CONTROLS...... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Facility Register

Lists of state and tribal leaking storage tanks

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

HIST LTANKS..... Listing of Leaking Storage Tanks

Lists of state and tribal registered storage tanks

FEMA UST..... Underground Storage Tank Listing UST...... Petroleum Bulk Storage (PBS) Database CBS UST...... Chemical Bulk Storage Database MOSF UST...... Major Oil Storage Facilities Database MOSF..... Major Oil Storage Facility Site Listing CBS..... Chemical Bulk Storage Site Listing CBS AST..... Chemical Bulk Storage Database MOSF AST..... Major Oil Storage Facilities Database

INDIAN UST...... Underground Storage Tanks on Indian Land

TANKS..... Storage Tank Faciliy Listing

State and tribal institutional control / engineering control registries

..... Restrictive Declarations Listing ENG CONTROLS Registry of Engineering Controls INST CONTROL...... Registry of Institutional Controls

Lists of state and tribal voluntary cleanup sites

VCP......Voluntary Cleanup Agreements INDIAN VCP..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS..... Brownfields Site List

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

SWTIRE______ Registered Waste Tire Storage & Facility List

SWRCY...... Registered Recycling Facility List

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI...... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register US CDL...... National Clandestine Laboratory Register

PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

HIST UST..... Historical Petroleum Bulk Storage Database HIST AST..... Historical Petroleum Bulk Storage Database

Local Land Records

LIENS...... Spill Liens Information LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

Hazardous Materials Information Reporting System

NY Hist Spills..... SPILLS Database

SPILLS 90...... SPILLS 90 data from FirstSearch SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR........ RCRA - Non Generators / No Longer Regulated

FUDS..... Formerly Used Defense Sites DOD...... Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION............ 2020 Corrective Action Program List

TSCA..... Toxic Substances Control Act

TRIS_____ Toxic Chemical Release Inventory System

SSTS..... Section 7 Tracking Systems ROD...... Records Of Decision RMP..... Risk Management Plans

RAATS_____RCRA Administrative Action Tracking System

PRP..... Potentially Responsible Parties PADS..... PCB Activity Database System

ICIS_____Integrated Compliance Information System

Act)/TSCA (Toxic Substances Control Act)

..... Material Licensing Tracking System COAL ASH DOE..... Steam-Electric Plant Operation Data

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS...... Incident and Accident Data

CONSENT...... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS..... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File

ABANDONED MINES..... Abandoned Mines

FINDS______Facility Index System/Facility Registry System DOCKET HWC______Hazardous Waste Compliance Docket Listing

UXO..... Unexploded Ordnance Sites

ECHO_____ Enforcement & Compliance History Information

FUELS PROGRAM..... EPA Fuels Program Registered Listing

AIRS..... Air Emissions Data

COAL ASH..... Coal Ash Disposal Site Listing

DRYCLEANERS..... Registered Drycleaners

E DESIGNATION..... E DESIGNATION SITE LISTING Financial Assurance..... Financial Assurance Information Listing

HSWDS..... Hazardous Substance Waste Disposal Site Inventory

SPDES......State Pollutant Discharge Elimination System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid 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.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

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 06/20/2022 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|----------------------|--------------------------|--------|------|
| NYC DEPT OF EDUCATIO
EPA ID:: NYD986882827 | 1270 HUGUENOT AVE | NW 1/8 - 1/4 (0.210 mi.) | B5 | 15 |
| NYCP&R - PRESCOTT PA
EPA ID:: NYR000143289 | HUGUENOT AVE & HYLAN | NW 1/8 - 1/4 (0.245 mi.) | B6 | 22 |

Lists of state- and tribal hazardous waste facilities

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Conservation's Inactive Hazardous waste Disposal Sites in New York State.

A review of the SHWS list, as provided by EDR, and dated 05/09/2022 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---------------------|----------------------|------------------------|--------|------|
| ALLIED PRINCE'S BAY | SEGUINE AVENUE & JOH | SW 1/2 - 1 (0.885 mi.) | 8 | 30 |
| Site Code: 55935 | | | | |

Lists of state and tribal leaking storage tanks

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 LTANKS list, as provided by EDR, and dated 05/09/2022 has revealed that there are 2 LTANKS sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|-------------------------------------|----------------------|--------------------------|--------|------|
| INTERMEDIATE SCHOOL | 1270 HUGUENOT AVENUE | NW 1/8 - 1/4 (0.210 mi.) | B3 | 9 |
| Spill Number/Closed Date: 0513720 / | 2006-03-13 | | | |

Site ID: 360246 Spill Date: 2006-02-28

 Lower Elevation
 Address
 Direction / Distance
 Map ID
 Page

 3554 HYLAN BLVD/ST J
 5150 HYLAN BLVD
 NE 1/4 - 1/2 (0.412 mi.)
 7
 27

Spill Number/Closed Date: 8808102 / 1993-01-01 Spill Number/Closed Date: 9204673 / 2003-02-10

Site ID: 327465 Site ID: 327466 Spill Date: 1989-01-10 Spill Date: 1992-07-10

Lists of state and tribal registered storage tanks

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 AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|----------------------------------|-----------------------|--------------------------|--------|------|
| PUBLIC SCHOOL 7 - ST | 1270 HUGUENOT AVENUE | NW 1/8 - 1/4 (0.210 mi.) | B4 | 12 |
| Database: AST, Date of Governmen | t Version: 03/21/2022 | | | |
| Facility Id: 2-478423 | | | | |

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

DEL SHWS: A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

A review of the DEL SHWS list, as provided by EDR, and dated 05/09/2022 has revealed that there is 1 DEL SHWS site within approximately 1 mile of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|----------------------|---------|------------------------|--------|------|
| ALLIED PRINCE'S BAY | | SW 1/2 - 1 (0.930 mi.) | 9 | 32 |
| Site Code Id: 243014 | | | | |

Records of Emergency Release Reports

NY Spills: Data collected on spills reported to NYSDEC. is 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.

A review of the NY Spills list, as provided by EDR, and dated 05/09/2022 has revealed that there is 1

NY Spills site within approximately 0.125 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|-------------------------------------|----------------------|-------------------------|--------|------|
| 1350 HUGUENOT AVE | 1350 HUGUENOT AVENUE | WNW 0 - 1/8 (0.033 mi.) | A2 | 8 |
| Spill Number/Closed Date: 9413113 / | 1995-01-01 | | | |

Site ID: 256735 Spill Date: 1995-01-01

Other Ascertainable Records

MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the MANIFEST list, as provided by EDR, and dated 01/01/2019 has revealed that there are 2 MANIFEST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|--|----------------------|--------------------------|--------|------|
| NYC DEPT OF EDUCATIO
EPA ID: NYD986882827 | 1270 HUGUENOT AVE | NW 1/8 - 1/4 (0.210 mi.) | B5 | 15 |
| NYCP&R - PRESCOTT PA
EPA ID: NYR000143289 | HUGUENOT AVE & HYLAN | NW 1/8 - 1/4 (0.245 mi.) | B6 | 22 |

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: 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.

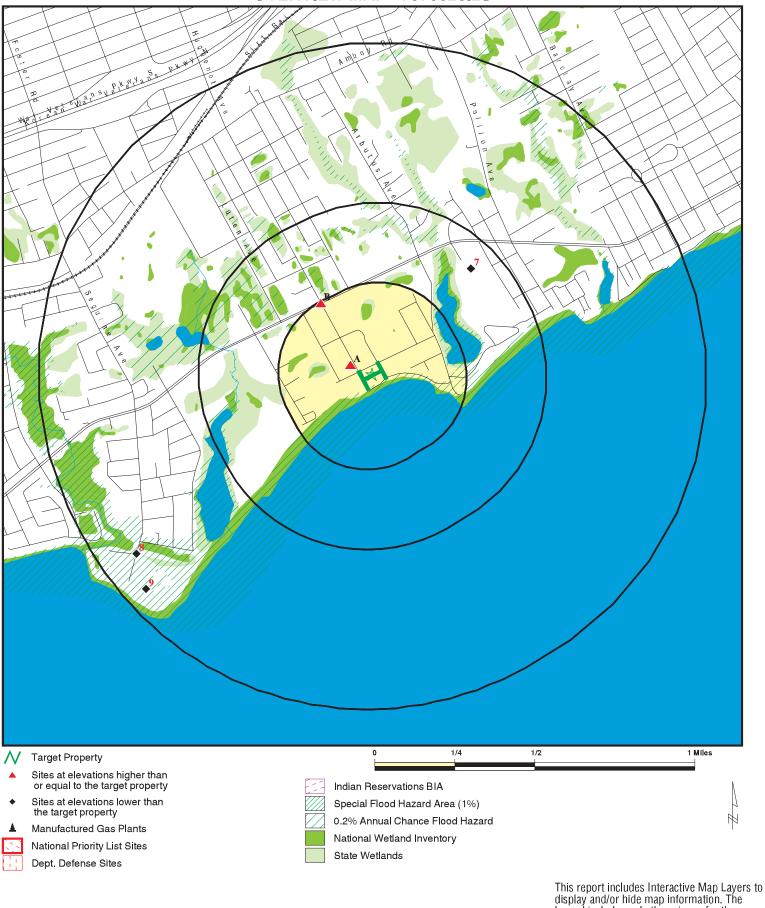
A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|------------------------|-------------------|------------------------|--------|------|
| STEWARTS SERVICE STA | 1357 HUGUENOT AVE | NW 0 - 1/8 (0.018 mi.) | A1 | 8 |

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

| Site Name | Database(s) |
|---------------------|-------------|
| SOUTH AVE | SWF/LF |
| BAYONNE BRIDGE RAMP | SWF/LF |

OVERVIEW MAP - 7076628.2S



display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Construction of Roadway Improvement

40.520694 / 74.183058

LAT/LONG:

Huguenot Ave. & Swaim Ave. bw Sore & Chester Aves. Staten Island NY 10312 ADDRESS:

CLIENT: CONTACT: The LiRo Group Amy Hewson

INQUIRY #: 7076628.2s DATE: August 04, 2 August 04, 2022 12:57 pm

DETAIL MAP - 7076628.2S



Construction of Roadway Improvement
Huguenot Ave. & Swaim Ave. bw Sore & Chester Aves.
Staten Island NY 10312
HAZ
40.520694 / 74.183058

CLIENT: The LiRo Group
CONTACT: Amy Hewson
INQUIRY #: 7076628.2s
DATE: August 04, 2022 12:58 pm

SITE NAME:

ADDRESS:

LAT/LONG:

| Database | Search
Distance
(Miles) | Target
Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | >1 | Total
Plotted | |
|---|---|--------------------|-------------|-------------|----------------|----------------|----------------|------------------|--|
| STANDARD ENVIRONMENT | AL RECORDS | | | | | | | | |
| Lists of Federal NPL (Su | perfund) site: | s | | | | | | | |
| NPL
Proposed NPL
NPL LIENS | 1.000
1.000
1.000 | | 0
0
0 | 0
0
0 | 0
0
0 | 0
0
0 | NR
NR
NR | 0
0
0 | |
| Lists of Federal Delisted | NPL sites | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 | |
| Lists of Federal sites subject to CERCLA removals and CERCLA orders | | | | | | | | | |
| FEDERAL FACILITY
SEMS | 0.500
0.500 | | 0
0 | 0
0 | 0
0 | NR
NR | NR
NR | 0
0 | |
| Lists of Federal CERCLA sites with NFRAP | | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |
| Lists of Federal RCRA facilities undergoing Corrective Action | | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 | |
| Lists of Federal RCRA TSD facilities | | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |
| Lists of Federal RCRA go | enerators | | | | | | | | |
| RCRA-LQG
RCRA-SQG
RCRA-VSQG | 0.250
0.250
0.250 | | 0
0
0 | 0
2
0 | NR
NR
NR | NR
NR
NR | NR
NR
NR | 0
2
0 | |
| Federal institutional controls / engineering controls registries | | | | | | | | | |
| LUCIS
US ENG CONTROLS
US INST CONTROLS | 0.500
0.500
0.500 | | 0
0
0 | 0
0
0 | 0
0
0 | NR
NR
NR | NR
NR
NR | 0
0
0 | |
| Federal ERNS list | | | | | | | | | |
| ERNS | TP | | NR | NR | NR | NR | NR | 0 | |
| Lists of state- and tribal hazardous waste facilitie | es | | | | | | | | |
| SHWS | 1.000 | | 0 | 0 | 0 | 1 | NR | 1 | |
| Lists of state and tribal landfills and solid waste disposal facilities | | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |
| Lists of state and tribal le | Lists of state and tribal leaking storage tanks | | | | | | | | |
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |

| Database | Search
Distance
(Miles) | Target
Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total
Plotted |
|--|--|--------------------|--------------------------------------|--|--|--|--|---|
| LTANKS
HIST LTANKS | 0.500
0.500 | | 0
0 | 1
0 | 1
0 | NR
NR | NR
NR | 2
0 |
| Lists of state and tribal registered storage tanks | | | | | | | | |
| FEMA UST UST CBS UST MOSF UST MOSF CBS AST CBS AST MOSF AST INDIAN UST TANKS | 0.250
0.250
0.250
0.500
0.500
0.250
0.250
0.500
0.250
0.250 | | 0
0
0
0
0
0
0
0 | 0
0
0
0
0
0
1
0
0
0 | NR
NR
NR
0
0
NR
NR
NR
NR | NR
NR
NR
NR
NR
NR
NR
NR
NR | NR
NR
NR
NR
NR
NR
NR
NR
NR | 0
0
0
0
0
0
1
0
0 |
| State and tribal institutional control / engineering control registries | | | | | | | | |
| RES DECL
ENG CONTROLS
INST CONTROL | 0.125
0.500
0.500 | | 0
0
0 | NR
0
0 | NR
0
0 | NR
NR
NR | NR
NR
NR | 0
0
0 |
| Lists of state and tribal v | oluntary clea | nup sites | | | | | | |
| VCP
INDIAN VCP | 0.500
0.500 | | 0
0 | 0
0 | 0
0 | NR
NR | NR
NR | 0
0 |
| Lists of state and tribal brownfield sites | | | | | | | | |
| BROWNFIELDS
ERP | 0.500
0.500 | | 0
0 | 0
0 | 0
0 | NR
NR | NR
NR | 0
0 |
| ADDITIONAL ENVIRONMENTAL RECORDS | | | | | | | | |
| Local Brownfield lists | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Local Lists of Landfill / Solid Waste Disposal Sites | | | | | | | | |
| SWTIRE
SWRCY
INDIAN ODI
ODI
DEBRIS REGION 9
IHS OPEN DUMPS | 0.500
0.500
0.500
0.500
0.500
0.500 | | 0
0
0
0
0 | 0
0
0
0
0 | 0
0
0
0
0 | NR
NR
NR
NR
NR | NR
NR
NR
NR
NR | 0
0
0
0
0 |
| Local Lists of Hazardous waste / Contaminated Sites | | | | | | | | |
| US HIST CDL
DEL SHWS
US CDL
PFAS | TP
1.000
TP
0.500 | | NR
0
NR
0 | NR
0
NR
0 | NR
0
NR
0 | NR
1
NR
NR | NR
NR
NR
NR | 0
1
0
0 |

| Database | Search
Distance
(Miles) | Target
Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total
Plotted |
|---|--|--------------------|--|---|---|---|---|--|
| Local Lists of Registered Storage Tanks | | | | | | | | |
| HIST UST
HIST AST | 0.250
TP | | 0
NR | 0
NR | NR
NR | NR
NR | NR
NR | 0
0 |
| Local Land Records | | | | | | | | |
| LIENS
LIENS 2 | TP
TP | | NR
NR | NR
NR | NR
NR | NR
NR | NR
NR | 0
0 |
| Records of Emergency F | Release Repo | rts | | | | | | |
| HMIRS
NY Spills
NY Hist Spills
SPILLS 90
SPILLS 80 | TP
0.125
0.125
0.125
0.125 | | NR
1
0
0
0 | NR
NR
NR
NR
NR | NR
NR
NR
NR
NR | NR
NR
NR
NR
NR | NR
NR
NR
NR
NR | 0
1
0
0 |
| Other Ascertainable Rec | ords | | | | | | | |
| RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE | 0.250 1.000 1.000 0.500 TP TP 0.250 TP TP TP 1.000 TP | | 0
0 0
0 NR
NR
0 NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR | 0
0
0
0
NR
NR
0
NR
NR
NR
NR
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NR
NR
NR | NR
0
0
NR
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NR
NR
NR
NR
NR | NR
0 0 NR
NR
NR
NR
NR
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NR
NR
NR
NR
NR
NR
NR
N | NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
N | 0
0
0
0
0
0
0
0
0
0 |
| COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS DOCKET HWC | 0.500
TP
TP
TP
TP
1.000
1.000
0.500
TP
TP
0.250
0.250
TP | | 0
NR
NR
NR
0
0
0
0
NR
NR
0
0
NR
NR | 0
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NR
NR
0
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NR
O O O R
NR
NR
NR
NR
NR | NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
NR
N | 0
0
0
0
0
0
0
0
0 |

| Database | Search
Distance
(Miles) | Target
Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total
Plotted |
|---|--|--------------------|--|---|--|--|--|---------------------------------|
| UXO
ECHO
FUELS PROGRAM
AIRS
COAL ASH
DRYCLEANERS | 1.000
TP
0.250
TP
0.500
0.250 | | 0
NR
0
NR
0
0 | 0
NR
0
NR
0 | 0
NR
NR
NR
0
NR | 0
NR
NR
NR
NR
NR | NR
NR
NR
NR
NR
NR | 0
0
0
0
0 |
| E DESIGNATION Financial Assurance HSWDS MANIFEST SPDES VAPOR REOPENED UIC COOLING TOWERS MINES MRDS | 0.125
TP
0.500
0.250
TP
0.500
TP
TP
TP | | 0
NR
0
0
NR
0
NR
NR
NR | NR
NR
0
2
NR
0
NR
NR
NR | NR
NR
O
NR
NR
O
NR
NR | NR
NR
NR
NR
NR
NR
NR | NR
NR
NR
NR
NR
NR
NR | 0
0
0
2
0
0
0 |
| LEAD TP NR NR NR NR NR NR 0 EDR HIGH RISK HISTORICAL RECORDS EDR Exclusive Records | | | | | | | | |
| EDR MGP
EDR Hist Auto
EDR Hist Cleaner | 1.000
0.125
0.125 | | 0
1
0 | 0
NR
NR | 0
NR
NR | 0
NR
NR | NR
NR
NR | 0
1
0 |
| EXClusive Recovered Govt. Archives | | | | | | | | |
| RGA HWS
RGA LF | TP
TP | | NR
NR | NR
NR | NR
NR | NR
NR | NR
NR | 0
0 |
| - Totals | | 0 | 2 | 6 | 1 | 2 | 0 | 11 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

A1 STEWARTS SERVICE STATION EDR Hist Auto 1020545795
NW 1357 HUGUENOT AVE N/A

1357 HUGUENOT AVE N/A STATEN ISLAND, NY 10312

< 1/8 STA 0.018 mi.

96 ft. Site 1 of 2 in cluster A

Relative: Higher EDR Hist Auto

Actual: Year: Name: Type:

35 ft. 1990 STEWARTS SERVICE STATION Gasoline Service Stations

1991STEWARTS SERVICE STATIONGasoline Service Stations1992STEWARTS SERVICE STATIONGasoline Service Stations1993STEWARTS SERVICE STATIONGasoline Service Stations1994STEWARTS SERVICE STATIONGasoline Service Stations

A2 1350 HUGUENOT AVE NY Spills S102149287 WNW 1350 HUGUENOT AVENUE N/A

WNW 1350 HUGUENOT AVENUE < 1/8 STATEN ISLAND, NY

0.033 mi.

172 ft. Site 2 of 2 in cluster A

 Relative:
 SPILLS:

 Higher
 Name:
 1350 HUGUENOT AVE

 Actual:
 Address:
 1350 HUGUENOT AVENUE

 37 ft.
 City,State,Zip:
 STATEN ISLAND, NY

Spill Number/Closed Date: 9413113 / 1995-01-01

 Facility ID:
 9413113

 Facility Type:
 ER

 DER Facility ID:
 210230

 Site ID:
 256735

 DEC Region:
 2

Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 4301
Spill Date: 1995-01-01
Investigator: O'DOWD

Referred To: Not reported
Reported to Dept: 1995-01-01
CID: Not reported
Water Affected: Not reported
Spill Source: Private Dwelling

Spill Notifier:
Cleanup Ceased:
Cleanup Meets Std:
Last Inspection:
Recommended Penalty:
UST Trust:
Remediation Phase:
Other
1995-01-01
True
Not reported
False
False

Date Entered In Computer: 1995-01-31
Spill Record Last Update: 2003-12-24
Spiller Name: Not reported
Spiller Company: TRUENPY RES.
Spiller Address: Not reported

Spiller Company: 001

Contact Name: Not reported

DEC Memo: ""

Remarks: "APPLIED SPEEDY DRY & CLEANED UP"

All Materials:

Site ID: 256735

Map ID MAP FINDINGS

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

1350 HUGUENOT AVE (Continued)

S102149287

Operable Unit ID: 1010615 Operable Unit: 01 Material ID: 375391 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum 1.00 Quantity: Units: G Recovered: .00

Oxygenate: Not reported

B3 INTERMEDIATE SCHOOL #7
NW 1270 HUGUENOT AVENUE SPDES N/A
1/8-1/4 STATEN ISLAND, NY 11101

1/8-1/4 0.210 mi.

1107 ft. Site 1 of 4 in cluster B

Relative: LTANKS:

HigherName:1270 HUGUENOT AVEActual:Address:1270 HUGUENOT AVE40 ft.City,State,Zip:STATEN ISLAND, NY

Spill Number/Closed Date: 0513720 / 2006-03-13

 Facility ID:
 0513720

 Site ID:
 360246

 Spill Date:
 2006-02-28

 Spill Cause:
 Tank Overfill

Spill Source: Commercial/Industrial

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4301 **SMSANGES** Investigator: Not reported Referred To: Reported to Dept: 2006-02-28 CID: 408 Water Affected: Not reported Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: Not reported Meets Standard: False **UST Involvement:** Not reported

Remediation Phase: 0

Date Entered In Computer: 2006-02-28
Spill Record Last Update: 2006-03-13
Spiller Name: RAY LARA
Spiller Company: Not reported

Spiller Address: 1270 HUGUENOT AVE

Spiller County: 001 Spiller Contact: RON

Spiller Phone: (718) 356-5904 Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 310362
DEC Memo: ""

Remarks: "PRODUCT IS 10-15 GALLONS, CLEAN UP IS IN PROGRESS"

All Materials:

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

INTERMEDIATE SCHOOL #7 (Continued)

S107658674

EDR ID Number

Site ID: 360246 Operable Unit ID: 1117424 Operable Unit: 01 Material ID: 2107934 Material Code: 0002A Material Name: #4 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 15.00 Units: G .00 Recovered:

Oxygenate: Not reported

SPDES:

Name: INTERMEDIATE SCHOOL #7
Address: 1270 HUGUENOT AVENUE
City, State, Zip: STATEN ISLAND, NY 11101

Permit Number: NY0036978

State-Region: 02

Expiration Date: 02/01/1996
Current Major Minor Status: Minor
Primary Facility SIC Code: 8999

State Water Body Name: RARITAN BAY

Limit Set Status Flag: Active
Total Actual Average Flow(MGD): 0.021
Total App Design Flow(MGD): Not reported
UDF1: Not reported

Lat/Long: 40.522528 / -74.185833

DMR Cognizant Official:

UDF2:

UDF3:

FIPS County Code:

A T SLIWA

001701

SA

NY085

Non-Gov Permit Affiliation Type Desc:
Non-Gov Permit Org Formal Name:
Non-Gov Permit Street Address:

DMR Mailing Address
INTERMEDIATE SCHOOL #7
1270 HUGUENOT AVENUE

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: STATEN ISLAND

Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 10312

Non-Gov Facility Affiliation Type Desc: Mailing Address

Non-Gov Facility Org Formal Name: BOARD OF EDUCAITON
Non-Gov Facility Street Address: INTERMEDIATE SCHOOL #7
Non-Gov Facility Supplemental Location: 1270 HUGUENOT AVENUE

Non-Gov Facility City: STATEN ISLAND

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11101 02030104040 State Water Body: Region Permit Processed: Not reported Not reported Dow Discharge Class Code: Not reported SPDES Class Description: Not reported Affiliation Type Description: Name: Not reported Contacts Title: Not reported Contacts Email: Not reported

MAP FINDINGS

Map ID Direction Distance Elevation

vation Site Database(s) EPA ID Number

INTERMEDIATE SCHOOL #7 (Continued)

S107658674

EDR ID Number

NOI Submission Date: Not reported

Name: INTERMEDIATE SCHOOL #7
Address: 1270 HUGUENOT AVENUE
City,State,Zip: STATEN ISLAND, NY 11101

 UDF2:
 001701

 UDF3:
 SA

 FIPS County Code:
 NY085

Non-Gov Permit Affiliation Type Desc:
Non-Gov Permit Org Formal Name:
Non-Gov Permit Street Address:

DMR Mailing Address
INTERMEDIATE SCHOOL #7
1270 HUGUENOT AVENUE

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: STATEN ISLAND

Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 10312
Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: BD. OF EDUCATION (C) NEW YORK Non-Gov Facility Street Address: DIV SCHOOL BLDGS-BUR OPERATION

Non-Gov Facility Supplemental Location: 28-11 QUEENS PLAZA NORTH

Non-Gov Facility City: LONG ISLAND CITY

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11101 State Water Body: 02030104040 Region Permit Processed: Not reported Not reported Dow Discharge Class Code: SPDES Class Description: Not reported Affiliation Type Description: Not reported Name: Not reported Contacts Title: Not reported Contacts Email: Not reported NOI Submission Date: Not reported

Name: INTERMEDIATE SCHOOL #7
Address: 1270 HUGUENOT AVENUE
City,State,Zip: STATEN ISLAND, NY 11101

 UDF2:
 001701

 UDF3:
 SA

 FIPS County Code:
 NY085

Non-Gov Permit Affiliation Type Desc:
Non-Gov Permit Org Formal Name:
Non-Gov Permit Street Address:

Permittee
BD OF ED (C) NY
28 11 QUEENS PLAZA

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: LONG ISLAND CITY

Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 11101
Non-Gov Facility Affiliation Type Desc: Mailing Address

Non-Gov Facility Org Formal Name: BOARD OF EDUCAITON
Non-Gov Facility Street Address: INTERMEDIATE SCHOOL #7
Non-Gov Facility Supplemental Location: 1270 HUGUENOT AVENUE

Non-Gov Facility City: STATEN ISLAND

Non-Gov Facility State Code:

Non-Gov Facility Zip Code:

State Water Body:

Region Permit Processed:

Dow Discharge Class Code:

NY

11101

02030104040

Not reported

Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

INTERMEDIATE SCHOOL #7 (Continued)

S107658674

SPDES Class Description: Not reported Affiliation Type Description: Not reported Not reported Name: Contacts Title: Not reported Contacts Email: Not reported NOI Submission Date: Not reported

INTERMEDIATE SCHOOL #7 Name: Address: 1270 HUGUENOT AVENUE City, State, Zip: STATEN ISLAND, NY 11101

UDF2: 001701 UDF3: SA NY085 FIPS County Code:

Non-Gov Permit Affiliation Type Desc: Permittee Non-Gov Permit Org Formal Name: BD OF ED (C) NY Non-Gov Permit Street Address: 28 11 QUEENS PLAZA

Non-Gov Permit Supplemental Location: Not reported

Non-Gov Permit City: LONG ISLAND CITY

Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11101 Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: BD. OF EDUCATION (C) NEW YORK Non-Gov Facility Street Address: DIV SCHOOL BLDGS-BUR OPERATION

Non-Gov Facility Supplemental Location: 28-11 QUEENS PLAZA NORTH

Non-Gov Facility City: LONG ISLAND CITY

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11101 02030104040 State Water Body: Region Permit Processed: Not reported Dow Discharge Class Code: Not reported SPDES Class Description: Not reported Affiliation Type Description: Not reported Not reported Name: Contacts Title: Not reported Contacts Email: Not reported NOI Submission Date: Not reported

PUBLIC SCHOOL 7 - STATEN ISLAND B4

1270 HUGUENOT AVENUE 1/8-1/4 STATEN ISLAND, NY 10312

0.210 mi.

NW

1107 ft. Site 2 of 4 in cluster B

Relative: AST: Higher PUBLIC SCHOOL 7 - STATEN ISLAND Name:

Address: 1270 HUGUENOT AVENUE Actual: City,State,Zip: STATEN ISLAND, NY 10312 40 ft.

Region: STATE DEC Region: 2 Site Status: Active Facility Id: 2-478423 Program Type: **PBS**

UTM X: 568956.08306 UTM Y: 4486161.48356 **Expiration Date:** 11/30/2024 Site Type: School

Affiliation Records:

AST

U001840891

N/A

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

PUBLIC SCHOOL 7 - STATEN ISLAND (Continued)

U001840891

EDR ID Number

Site Id: 21262 Affiliation Type: Facility Owner

Company Name: NEW YORK CITY DEP. OF EDUCATION

Contact Type: MANAGER, FUEL DIVISION
Contact Name: JOSEPH YOUNGHESE
Address1: 44-36 VERNON BOULEVARD

Address2: Not reported
City: LONG ISLAND CITY

State: NY
Zip Code: 11101
Country Code: 001

Phone: (718) 349-5751

EMail: JYOUNGHESE@SCHOOLS.NYC.GOV

Fax Number: Not reported Modified By: DAFRANCI Date Last Modified: 2020-10-23

Site Id: 21262

Affiliation Type: Facility Operator

Company Name: PUBLIC SCHOOL 7 - STATEN ISLAND

Contact Type: Not reported

Contact Name: RICHARD PEDERSEN

Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported

Country Code: 001

Phone: (718) 356-5904
EMail: Not reported
Fax Number: Not reported
Modified By: JSMACRI
Date Last Modified: 2019-08-12

Site Id: 21262

Affiliation Type: Emergency Contact

Company Name: NEW YORK CITY DEP. OF EDUCATION

Contact Type: Not reported
Contact Name: KEN MAHADEO
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (646) 210-7918
EMail: Not reported
Fax Number: Not reported
Modified By: JSMACRI
Date Last Modified: 2019-08-12

Site Id: 21262 Affiliation Type: Mail Contact

Company Name: NEW YORK CITY DEP. OF EDUCATION

Contact Type: MANAGER, FUEL DIVISION
Contact Name: JOSEPH YOUNGHESE
Address1: 44-36 VERNON BOULEVARD

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PUBLIC SCHOOL 7 - STATEN ISLAND (Continued)

U001840891

Address2: Not reported

LONG ISLAND CITY City:

State: NY Zip Code: 11101 Country Code: 001

Phone: (718) 349-5779

JYOUNGHESE@SCHOOLS.NYC.GOV EMail:

Fax Number: Not reported Modified By: **JSMACRI** Date Last Modified: 2021-01-12

Tank Info:

Tank Number: 001 38507 Tank Id: Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Equipment Records:

H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)

L00 - Piping Leak Detection - None

G02 - Tank Secondary Containment - Vault (w/access)

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

C03 - Pipe Location - Aboveground/Underground Combination

J02 - Dispenser - Suction Dispenser 104 - Overfill - Product Level Gauge (A/G)

Tank Location: Aboveground - on saddles, legs, racks, etc.... Tank bottom is elevated

above grade or tank pad, allowing visual inspection.

Steel/Carbon Steel/Iron Tank Type:

Tank Status: In Service Pipe Model: Not reported Install Date: 11/09/1962 Capacity Gallons: 10000 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True Modified By: **JSMACRI** Last Modified: 08/12/2019

Material Name: #4 fuel oil (on-site consumption)

Tank Number: 002 Tank Id: 38508 Material Code: 0003

#6 Fuel Oil (On-Site Consumption) Common Name of Substance:

Equipment Records:

H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)

L00 - Piping Leak Detection - None

Map ID MAP FINDINGS

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

PUBLIC SCHOOL 7 - STATEN ISLAND (Continued)

U001840891

G02 - Tank Secondary Containment - Vault (w/access)

K00 - Spill Prevention - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

E00 - Piping Secondary Containment - None

J02 - Dispenser - Suction Dispenser

C03 - Pipe Location - Aboveground/Underground Combination

104 - Overfill - Product Level Gauge (A/G)

Tank Location: Aboveground - on saddles, legs, racks, etc.... Tank bottom is elevated

above grade or tank pad, allowing visual inspection.

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 11/09/1962
Capacity Gallons: 10000
Tightness Test Method: -

Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True

Modified By: DAFRANCI Last Modified: 10/23/2020

Material Name: #4 fuel oil (on-site consumption)

 B5
 NYC DEPT OF EDUCATION - I S 7R
 RCRA-SQG
 1005417203

 NW
 1270 HUGUENOT AVE
 MANIFEST
 NYD986882827

 1/8-1/4
 STATEN ISLAND, NY 10312
 LEAD

0.210 mi.

1107 ft. Site 3 of 4 in cluster B

Relative: RCRA-SQG:

HigherDate Form Received by Agency:20141021Actual:Handler Name:NYC DEPT OF EDUCATION - I S 7R

40 ft. Handler Address: 1270 HUGUENOT AVE

Handler City, State, Zip: STATEN ISLAND, NY 10312
EPA ID: NYD986882827
Contact Name: ALEXANDER LEMPERT

Contact Address: THOMSON AVE
Contact City, State, Zip: LONG ISLAND CITY, NY 11101

 Contact Telephone:
 718-472-8501

 Contact Fax:
 718-472-8500

Contact Email: ALEMPERT@NYCSCA.ORG

Contact Title: DIRECTOR
EPA Region: 02
Land Type: Municipal

Federal Waste Generator Description: Small Quantity Generator

Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities

State District Owner: NY

State District: NYSDEC R2
Mailing Address: THOMSON AVE

Mailing City, State, Zip: LONG ISLAND CITY, NY 11101

Owner Name: NYC DEPT OF EDUCATION

Owner Type: Municipal

MAP FINDINGS

Map ID Direction Distance Elevation

Site

Database(s)

EDR ID Number EPA ID Number

NYC DEPT OF EDUCATION - I S 7R (Continued)

Closure Workload Universe:

1005417203

Operator Name: NYC DEPT OF SCHOOL FACILITIES Operator Type: Municipal Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: Nο Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No Underground Injection Control: Nο Off-Site Waste Receipt: No Universal Waste Indicator: No Universal Waste Destination Facility: No Federal Universal Waste: No

Active Site Fed-Reg Treatment Storage and Disposal Facility:
Active Site Converter Treatment storage and Disposal Facility:
Active Site State-Reg Treatment Storage and Disposal Facility:
Not reported
Not reported

Active Site State-Reg Handler: --

Federal Facility Indicator: Not reported

Hazardous Secondary Material Indicator: NN

Sub-Part K Indicator: Not reported Commercial TSD Indicator: No Treatment Storage and Disposal Type: Not reported 2018 GPRA Permit Baseline: Not on the Baseline 2018 GPRA Renewals Baseline: Not on the Baseline Permit Renewals Workload Universe: Not reported Permit Workload Universe: Not reported Permit Progress Universe: Not reported Post-Closure Workload Universe: Not reported

Not reported

202 GPRA Corrective Action Baseline:

Corrective Action Workload Universe:

No Subject to Corrective Action Universe:

No Non-TSDFs Where RCRA CA has Been Imposed Universe:

TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

TSDFs Only Subject to CA under Discretionary Auth Universe:

No

Corrective Action Priority Ranking: No NCAPS ranking

Environmental Control Indicator:

Institutional Control Indicator:

No
Human Exposure Controls Indicator:

N/A
Groundwater Controls Indicator:

N/A

Operating TSDF Universe:

Full Enforcement Universe:

Not reported

Not reported

Significant Non-Complier Universe: No
Unaddressed Significant Non-Complier Universe: No
Addressed Significant Non-Complier Universe: No
Significant Non-Complier With a Compliance Schedule Universe: No

Financial Assurance Required:
Handler Date of Last Change:
Recognized Trader-Importer:
No
Recognized Trader-Exporter:
No
Importer of Spent Lead Acid Batteries:
No
Exporter of Spent Lead Acid Batteries:
No

Recycler Activity Without Storage:

Manifest Broker:

Not reported

Not reported

Sub-Part P Indicator: No

Map ID MAP FINDINGS

Direction Distance Elevation

ion Site Database(s) EPA ID Number

NYC DEPT OF EDUCATION - IS 7R (Continued)

1005417203

EDR ID Number

Hazardous Waste Summary:

Waste Code: D000
Waste Description: Not Defined

Waste Code: D008 Waste Description: LEAD

Waste Code: D009
Waste Description: MERCURY

Handler - Owner Operator:

Owner/Operator Indicator: Owner

Owner/Operator Name: CITY OF NEW YORK

Legal Status:MunicipalDate Became Current:Not reportedDate Ended Current:Not reportedOwner/Operator Address:1 CENTRE ST

Owner/Operator City, State, Zip: NEW YORK, NY 10007

Owner/Operator Telephone: 212-669-8708
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

Owner/Operator Name: NYC DEPT OF SCHOOL FACILITIES

Legal Status: Municipal Date Became Current: 19650827 **Date Ended Current:** Not reported Owner/Operator Address: Not reported Owner/Operator City, State, Zip: Not reported Owner/Operator Telephone: Not reported Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: NYC DEPT OF EDUCATION

Legal Status:MunicipalDate Became Current:19650827Date Ended Current:Not reported

Owner/Operator Address: 30-30 THOMSON AVE

Owner/Operator City, State, Zip: LONG ISLAND CITY, NY 11101

Owner/Operator Telephone: 718-472-8501
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Owner/Operator Name: CITY OF NEW YORK

Legal Status:MunicipalDate Became Current:20010101Date Ended Current:Not reportedOwner/Operator Address:1 CENTRE ST

Owner/Operator City, State, Zip: NEW YORK, NY 10007

Owner/Operator Telephone: 212-669-8708
Owner/Operator Telephone Ext: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYC DEPT OF EDUCATION - IS 7R (Continued)

1005417203

Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

CITY OF NEW YORK Owner/Operator Name:

Legal Status: Municipal Date Became Current: 20010101 Date Ended Current: Not reported Owner/Operator Address: 1 CENTRE ST

Owner/Operator City, State, Zip: NEW YORK, NY 10007

Owner/Operator Telephone: 212-669-8708 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20060101

Handler Name: NYC BD OF ED - I S 7R

Federal Waste Generator Description: Not a generator, verified

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Nο

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

20070101 Receive Date:

Handler Name: NYC BD OF ED - I S 7R

Not a generator, verified Federal Waste Generator Description:

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: No

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

20000907 Receive Date:

NYC BD OF ED - I S 7R Handler Name:

Federal Waste Generator Description: Small Quantity Generator

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: No

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

Receive Date: 20141021 NYC DEPT OF EDUCATION - I S 7R Handler Name:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYC DEPT OF EDUCATION - IS 7R (Continued)

1005417203

Federal Waste Generator Description: **Small Quantity Generator**

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Yes

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 611110

NAICS Description: **ELEMENTARY AND SECONDARY SCHOOLS**

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

NY MANIFEST:

Name: NYC BD OF ED - I S 7R Address: 1270 HUGUENOT AVE City,State,Zip: STATEN ISLAND, NY 10312

Country: USA

NYD986882827 EPA ID: Facility Status: Not reported

Location Address 1: 1270 HUGUENOT AVE

Code:

Location Address 2: Not reported Not reported Total Tanks: Location City: STATEN ISLAND

Location State: NY Location Zip: 10312 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986882827

Mailing Name: NYC BD OF ED - I S 7R Mailing Contact: NYC BD OF ED - I S 7R Mailing Address 1: 44-36 VERNON BLVD

Mailing Address 2: Not reported

Mailing City: LONG ISLAND CITY

Mailing State: NY Mailing Zip: 11101 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 718566500

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported Not reported seq:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYC DEPT OF EDUCATION - IS 7R (Continued)

1005417203

Year: 2018

Trans1 State ID: MAD985286988 Trans2 State ID: Not reported Generator Ship Date: 11/17/2010 Trans1 Recv Date: 11/17/2010 Trans2 Recv Date: Not reported TSD Site Recv Date: 11/22/2010 Part A Recy Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986882827 Not reported Trans1 EPA ID: Trans2 EPA ID: Not reported TSDF ID 1: NYD077444263 TSDF ID 2: Not reported 004139027FLE Manifest Tracking Number:

Import Indicator: Ν **Export Indicator:** Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: H141 Waste Code: Not reported Waste Code: Not reported

Quantity:

Units: P - Pounds

Number of Containers:

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity: Waste Code: D002 Not reported Waste Code 1_2: Waste Code 1_3: Not reported Waste Code 1 4: Not reported Waste Code 1_5: Not reported Not reported Waste Code 1_6:

NYC LEAD 2:

I.S. 7 - STATEN ISLAND Name: Address: 1270 HUGUENOT AVENUE City,State,Zip: STATEN ISLAND, NY

Geographical District: 31 **Building Code:** R007 121 BR Room: **Deteriorated Paint:** NO Presence of LBP: NA Stabilization Required: NA Stabilization Complete: NA

Map ID MAP FINDINGS

Direction Distance Elevation

n Site Database(s) EPA ID Number

NYC DEPT OF EDUCATION - I S 7R (Continued)

1005417203

EDR ID Number

Name: I.S. 7 - STATEN ISLAND
Address: 1270 HUGUENOT AVENUE
City,State,Zip: STATEN ISLAND, NY

Geographical District:

Building Code:

Room:

Deteriorated Paint:

Presence of LBP:

Stabilization Required:

NA

Stabilization Complete:

NA

Name: I.S. 7 - STATEN ISLAND
Address: 1270 HUGUENOT AVENUE
City, State, Zip: STATEN ISLAND, NY

Geographical District: 31
Building Code: R007
Room: 129 BR
Deteriorated Paint: NO
Presence of LBP: NA
Stabilization Required: NA
Stabilization Complete: NA

Name:I.S. 7 - STATEN ISLANDAddress:1270 HUGUENOT AVENUECity,State,Zip:STATEN ISLAND, NY

Geographical District: 31
Building Code: R007
Room: 221 BR
Deteriorated Paint: NO
Presence of LBP: NA
Stabilization Required: NA
Stabilization Complete: NA

Name: I.S. 7 - STATEN ISLAND
Address: 1270 HUGUENOT AVENUE
City,State,Zip: STATEN ISLAND, NY

Geographical District: 31
Building Code: R007
Room: 227 BR
Deteriorated Paint: NO
Presence of LBP: NA
Stabilization Required: NA
Stabilization Complete: NA

Name: I.S. 7 - STATEN ISLAND
Address: 1270 HUGUENOT AVENUE
City, State, Zip: STATEN ISLAND, NY

Geographical District: 31
Building Code: R007
Room: 321 BR
Deteriorated Paint: NO
Presence of LBP: NA
Stabilization Required: NA
Stabilization Complete: NA

Name: I.S. 7 - STATEN ISLAND
Address: 1270 HUGUENOT AVENUE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYC DEPT OF EDUCATION - IS 7R (Continued)

1005417203

City, State, Zip: STATEN ISLAND, NY

Geographical District: 31 Building Code: R007 Room: 327 BR Deteriorated Paint: NO Presence of LBP: NA Stabilization Required: NA Stabilization Complete: NA

Name: I.S. 7 - STATEN ISLAND 1270 HUGUENOT AVENUE Address: City,State,Zip: STATEN ISLAND, NY

Geographical District: 31 **Building Code:** R007 B-11 BR Room: Deteriorated Paint: NO Presence of LBP: NA Stabilization Required: NA Stabilization Complete: NA

Name: I.S. 7 - STATEN ISLAND 1270 HUGUENOT AVENUE Address: City, State, Zip: STATEN ISLAND, NY

Geographical District: 31 Building Code: R007 Room: B-9 BR **Deteriorated Paint:** NO Presence of LBP: NA Stabilization Required: NA Stabilization Complete: NA

Name: I.S. 7 - STATEN ISLAND Address: 1270 HUGUENOT AVENUE City,State,Zip: STATEN ISLAND, NY

Geographical District: 31 Building Code: R007 Room: Library **Deteriorated Paint:** NO Presence of LBP: NA Stabilization Required: NA Stabilization Complete: NA

В6 **NYCP&R - PRESCOTT PARK** NW **HUGUENOT AVE & HYLAN BLVD** 1/8-1/4

STATEN ISLAND, NY 10309

1292 ft. Site 4 of 4 in cluster B

Relative: RCRA-SQG:

0.245 mi.

Higher Date Form Received by Agency: 20070101

NYCP&R - PRESCOTT PARK Handler Name: Actual:

Handler Address: **HUGUENOT AVE & HYLAN BLVD** 41 ft.

Handler City, State, Zip: STATEN ISLAND, NY 10309

EPA ID: NYR000143289 Contact Name: **BOGDAN SZCZUREK BRIDGEWATER ST** Contact Address: Contact City, State, Zip: BROOKLYN, NY 11222

Contact Telephone: 718-599-3718 RCRA-SQG 1010328459

NYR000143289

MANIFEST

MAP FINDINGS

Map ID Direction Distance Elevation

Database(s) EPA ID Number

Database(s) EPA ID Number

NYCP&R - PRESCOTT PARK (Continued)

1010328459

Contact Fax: Not reported

Contact Email: RMCBOB@EARTHLINK.NET

Contact Title: Not reported EPA Region: 02
Land Type: Municipal

Federal Waste Generator Description: Small Quantity Generator

Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities

State District Owner: NY

State District:

Mailing Address:

Mailing City,State,Zip:

NYSDEC R2

BRIDGEWATER ST

BROOKLYN, NY 11222

Owner Name: NEW YORK CITY DEPT OF PARKS & RECREATION

Owner Type: Municipal

Operator Name: NO NAME FOUND

Operator Type: Private Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: Nο **Underground Injection Control:** Nο Off-Site Waste Receipt: No Universal Waste Indicator: No Universal Waste Destination Facility: No Federal Universal Waste: No

Active Site Fed-Reg Treatment Storage and Disposal Facility:
Active Site Converter Treatment storage and Disposal Facility:
Active Site State-Reg Treatment Storage and Disposal Facility:
Not reported
Not reported

Active Site State-Reg Handler: ---

Federal Facility Indicator: Not reported

Hazardous Secondary Material Indicator: NN
Sub-Part K Indicator: Not re

Sub-Part K Indicator: Not reported Commercial TSD Indicator: No

Treatment Storage and Disposal Type: Not reported

2018 GPRA Permit Baseline:

2018 GPRA Renewals Baseline:

Permit Renewals Workload Universe:

Permit Workload Universe:

Permit Progress Universe:

Post-Closure Workload Universe:

Closure Workload Universe:

Not reported

202 GPRA Corrective Action Baseline:

Corrective Action Workload Universe:

Subject to Corrective Action Universe:

No
Non-TSDFs Where RCRA CA has Been Imposed Universe:

TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

No
TSDFs Only Subject to CA under Discretionary Auth Universe:

No

Corrective Action Priority Ranking: No NCAPS ranking

Environmental Control Indicator:

No
Institutional Control Indicator:

No
Human Exposure Controls Indicator:

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYCP&R - PRESCOTT PARK (Continued)

1010328459

Groundwater Controls Indicator: N/A

Operating TSDF Universe: Not reported Full Enforcement Universe: Not reported Significant Non-Complier Universe: No

Unaddressed Significant Non-Complier Universe: No Addressed Significant Non-Complier Universe: No Significant Non-Complier With a Compliance Schedule Universe: No

Financial Assurance Required: Not reported Handler Date of Last Change: 20150414 Recognized Trader-Importer: No Recognized Trader-Exporter: No Importer of Spent Lead Acid Batteries: No Exporter of Spent Lead Acid Batteries: No

Recycler Activity Without Storage: Not reported Manifest Broker: Not reported

Sub-Part P Indicator: No

Hazardous Waste Summary:

D008 Waste Code: Waste Description: **LEAD**

Handler - Owner Operator:

Owner/Operator Indicator: Owner

NEW YORK CITY DEPT OF PARKS & RECREATION Owner/Operator Name:

Legal Status: Municipal Date Became Current: 20061105 **Date Ended Current:** Not reported

OLMSTED CENTER CORONA PARK Owner/Operator Address:

Owner/Operator City, State, Zip: FLUSHING, NY 11368

Owner/Operator Telephone: Not reported Owner/Operator Telephone Ext: Not reported Not reported Owner/Operator Fax: Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

Owner/Operator Name: REGIONAL MANAGEMENT & CONSULTING INC

Legal Status: Private Date Became Current: 20061105 **Date Ended Current:** Not reported Owner/Operator Address: Not reported Owner/Operator City, State, Zip: Not reported Owner/Operator Telephone: Not reported Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

NEW YORK CITY DEPT OF PARKS & RECREATION Owner/Operator Name:

Legal Status: Municipal Date Became Current: 20061105 **Date Ended Current:** Not reported

OLMSTED CENTER CORONA PARK Owner/Operator Address:

FLUSHING, NY 11368 Owner/Operator City, State, Zip:

Owner/Operator Telephone: Not reported Owner/Operator Telephone Ext: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYCP&R - PRESCOTT PARK (Continued)

1010328459

Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator

NO NAME FOUND Owner/Operator Name:

Legal Status: Private Date Became Current: 20061105 Date Ended Current: Not reported Owner/Operator Address: Not reported Owner/Operator City, State, Zip: Not reported Owner/Operator Telephone: Not reported Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20061212

Handler Name: NYCP&R - PRESCOTT PARK

Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Nο

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

20070101 Receive Date:

Handler Name: NYCP&R - PRESCOTT PARK

Federal Waste Generator Description: Small Quantity Generator

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Yes Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

Receive Date: 20061213

NYCP&R - PRESCOTT PARK Handler Name:

Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator

State District Owner: NY Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: No

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYCP&R - PRESCOTT PARK (Continued)

1010328459

NAICS Code: 23599

NAICS Description: ALL OTHER SPECIAL TRADE CONTRACTORS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

NY MANIFEST:

NYCP&R - PRESCOTT PARK Name: Address: **HUGUENOT AVE & HYLAN BLVD** City,State,Zip: STATEN ISLAND, NY 10309

Country: USA

EPA ID: NYR000143289 Facility Status: Not reported

HUGUENOT AVE & HYLAN BLVD Location Address 1:

Code:

Location Address 2: Not reported Total Tanks: Not reported Location City: STATEN ISLAND

NY Location State: 10309 Location Zip: Location Zip 4: Not reported

NY MANIFEST:

NYR000143289 EPAID:

Mailing Name: NYCP&R - PRESCOTT PARK Mailing Contact: NYCP&R - PRESCOTT PARK Mailing Address 1: **HUGUENOT AVE & HYLAN BLVD**

Mailing Address 2: Not reported Mailing City: STATEN ISLAND

Mailing State: NY Mailing Zip: 10309 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: Not reported

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported seq: Not reported Year: 2018

Trans1 State ID: NYR000081570 Trans2 State ID: NYD049178296 Generator Ship Date: 12/12/2006 Trans1 Recv Date: 12/12/2006 Trans2 Recv Date: 02/16/2007 TSD Site Recv Date: 02/27/2007 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYR000143289 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: CDX480000000

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NYCP&R - PRESCOTT PARK (Continued)

1010328459

TSDF ID 2: Not reported 000078451JJK Manifest Tracking Number:

Import Indicator: Ν Export Indicator: Υ Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν Manifest Ref Number: Not reported

Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: H141 Waste Code: Not reported Quantity: 440 P - Pounds Units:

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: Waste Code: D008 Waste Code 1 2: Not reported Waste Code 1 3: Not reported Waste Code 1_4: Not reported Waste Code 1_5: Not reported Waste Code 1_6: Not reported

7 3554 HYLAN BLVD/ST JOSEPH

ΝE 5150 HYLAN BLVD 1/4-1/2 STATEN ISLAND, NY

0.412 mi. 2176 ft.

LTANKS: Relative: Lower Name:

Address: 5150 HYLAN BLVD Actual: City, State, Zip: STATEN ISLAND, NY 26 ft. Spill Number/Closed Date: 8808102 / 1993-01-01

> Facility ID: 8808102 Site ID: 327465 Spill Date: 1989-01-10 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: C4 Cleanup Ceased: Not reported SWIS: 4301 Investigator: **TOMASELLO** Referred To: Not reported Reported to Dept: 1989-01-11

CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester

LTANKS

S106703300

N/A

5150 HYLAN BLV/ST.JOSEPH

Map ID MAP FINDINGS

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

3554 HYLAN BLVD/ST JOSEPH (Continued)

S106703300

Last Inspection: Not reported Recommended Penalty: False Meets Standard: True **UST Involvement:** False Remediation Phase: 0

Date Entered In Computer: 1989-01-19 Spill Record Last Update: 2003-09-30 Spiller Name: Not reported

Spiller Company: ST. JOSEPH'S HIGH SCHOOL

Spiller Address: 5150 HYLAN BLVD

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: DER Facility ID: 263598 DEC Memo:

"15K TANK FAILED HORNER EZY CHECK WITH A LEAK RATE OF -.3GPH, DEC Remarks:

NOTIFIED & ON SCENE CLEANING UP."

All TTF:

Facility ID: 8808102 Spill Number: 8808102 Spill Tank Test: 1535069 Site ID: 327465 Tank Number: Not reported

Tank Size: Material: 0001 **EPA UST:** Not reported UST: Not reported Not reported Cause: Source: Not reported

Test Method: 00 Unknown Test Method 2: Leak Rate: .00

Gross Fail: Not reported Modified By: Spills

Last Modified Date: Not reported

All Materials:

327465 Site ID: Operable Unit ID: 924514 Operable Unit: 01 Material ID: 452869 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Units: L Recovered: .00

Oxygenate: Not reported

3554 HYLAN BLVD/ST JOSEPH Name:

Address: 5150 HYLAN BLVD City, State, Zip: STATEN ISLAND, NY Map ID MAP FINDINGS

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

3554 HYLAN BLVD/ST JOSEPH (Continued)

S106703300

9204673 / 2003-02-10 Spill Number/Closed Date:

Facility ID: 9204673 Site ID: 327466 Spill Date: 1992-07-10 Spill Cause: Tank Overfill

Spill Source: Institutional, Educational, Gov., Other

0

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4301 Investigator: **TOMASELLO** Not reported Referred To: Reported to Dept: 1992-07-23 CID: Not reported Water Affected: Not reported Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

Date Entered In Computer: 1992-07-28 Spill Record Last Update: 2004-02-19 Spiller Name: Not reported Spiller Company: Not reported Spiller Address: Not reported Spiller County: 001 Spiller Contact: Not reported Spiller Phone: Not reported

Spiller Extention: Not reported DEC Region: DER Facility ID: 263598 DEC Memo:

"TANK PULL; CONTAMINATED SOIL BEING REMOVED BY STAR OR RIZZO Remarks:

TRUCKING. PETRO TANK CLEANERS."

All Materials:

Oxygenate:

Remediation Phase:

Site ID: 327466 Operable Unit ID: 968330 Operable Unit: 01 Material ID: 412371 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Units: L Recovered: .00

TC7076628.2s Page 29

Not reported

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

8 ALLIED PRINCE'S BAY SHWS S106905135 SW SEGUINE AVENUE & JOHNSTON TERRACE N/A

SW SEGUINE AVENUE & JOHNSTON TERRACI 1/2-1 STATEN ISLAND, NY 10309

0.885 mi. 4673 ft.

Relative: SHWS:

Lower Name: ALLIED PRINCE'S BAY

Actual: Address: SEGUINE AVENUE & JOHNSTON TERRACE

5 ft. City,State,Zip: STATEN ISLAND, NY 10309

HW Program: Site Code: 55935 Classification: С Region: 2 Acres: 23.000 HW Code: 243014 Record Add: 11/18/1999 Record Upd: 07/30/2007 Updated By: **MOBARRIE**

Site Description: "This site is located in southeastern Staten Island on Sequine Point

and is surrounded on the southeast by Raritan Bay and on the southwest by Prince's Bay. The site is bounded by Sequine Avenue, Johnston Terrace, and Holton Avenue. In 1854 this location became the

Palm Oil Processing Plant. Over its history it was used as a

drainpipe manufacturing plant and later a dental supply manufacturer. During the latter period, nitrous oxide (laughing gas), engines, compressors, syringes, gold solders, and dental filling materials were produced on-site. By the 1940s, molded plastic products were also produced. The marsh and creek north of the factory complex were used for dumping the wastes and debris from the plastic moldings. The present owners, Muss Development Corporation, converted the buildings in 1970 into a shopping complex that was active until 1983. Sampling indicated the presence of PCBs and heavy metals in the sediment of

characterize the site's contamination has been completed. The Record of Decision (ROD) calls for the division of the site into two Operable Units (OUs) and delisting a portion of the property. All hazardous and contaminated soils from units 1 and 2 have been

Lemon Creek. A Remedial Investigation / Feasibility Study (RI/FS) to

excavated and transported off-site for proper disposal. The construction of the new Lemon Creek stream has been completed. A total of 3,200 tons of contaminated soils were excavated and transported off site for disposal. Old Lemon Creek was excavated and backfilled with clean soil. The grade of the entire property has been raised by more than four feet with clean soils. Revetment has been constructed along the Prince's Bay side. OM&M has been completed

and the Site has been removed from the Registry of Inactive Hazardous Waste Sites. The property is being redeveloped for luxury homes."

"There are no environmental problems associated with waste remaining

at this site. Institutional controls are in place to prevent any potential health and safety problems resulting from any future excavations. Developer has started construction of luxury homes."

Health Problem: "Removal of PCBs, polynuclear aromatic hydrocarbons (PAHs) and volatile organic compound (VOCs) contaminated soil hot spots have

been completed. Residual soil contamination was covered with clean fill, reducing the potential for direct contact exposure to

contaminants in soils. The homes in the area are served by public

water."

Dump: False Structure: False

Env Problem:

EDR ID Number

MAP FINDINGS

Map ID Direction Distance Elevation

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

ALLIED PRINCE'S BAY (Continued)

S106905135

Lagoon: False
Landfill: True
Pond: False
Disp Start: 1854
Disp Term: 1971

Lat/Long: 40:30:40:0 / 74:11:47:0

Dell: False

Record Add: 1999-11-18 12:00:00 Record Upd: 1999-11-18 12:00:00

Updated By: INITIAL
Own Op: 3
Sub Type: NNN
Owner Name: Not reported

Owner Company: S.S. WHITE MANUFACTURING COMPANY

Owner Address: Not reported Owner Addr2: Not reported

Owner City, St, Zip: ZZ

Owner Country: United States of America

Own Op: 4 Sub Type: E

Owner Name: Not reported

Owner Company: S.S. White Manufacturing Co.

Owner Address: Not reported Owner Addr2: Not reported Owner City,St,Zip: ZZ

Owner Country: United States of America
Own Op: 1

Sub Type: E

Owner Name: Not reported

Owner Company: Muss Development Co.
Owner Address: 118-35 QUEENS BOULEVARD

Owner Addr2: Not reported

Owner City,St,Zip: FOREST HILLS, NY 11375 Owner Country: United States of America

HW Code: 243014
Waste Type: LEAD
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 243014

Waste Type: POLYCHLORINATED BIPHENYLS (PCB)

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 243014
Waste Type: PCBS
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 243014

Waste Type: POLYNUCLEAR AROMATIC HYDROCARBONS

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 243014

Waste Type: VOLATILE ORGANIC CHEMICALS

Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: Not reported
Cross Ref Type Code: Not reported
Cross Ref Type: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ALLIED PRINCE'S BAY (Continued)

S106905135

Record Added Date: Not reported Record Updated: Not reported Updated By: Not reported

ALLIED PRINCE'S BAY DEL SHWS S105973026 9 N/A

SW

1/2-1

STATEN ISLAND, NY 10309

0.930 mi. 4912 ft.

Relative: **DEL SHWS:** Lower Name:

ALLIED PRINCE'S BAY Address: Not reported Actual:

City,State,Zip: STATEN ISLAND, NY 10309 2 ft.

1996 Year: 243014 Site Code Id: Site Classification: Not reported Region: Not reported Epa Id Number: Not reported

Site Type - Dump: No Site Type - Structure: No Site Type - Lagoon: No Site Type - Landfill: No Site Type - Treat Pond: No

Site Size (Acres): Not reported Site Size Comment: Not reported Period Assoc/HW Start: 1854 Period Assoc/HW End: 1971

Lat/Long: Not reported Lat/Long Decimal: Not reported

Lat/Long (dms): 40 30 397.0 / 74 11 473.0

Hazardous Waste Code: Not reported Hazard Waste Disposed: **PCBs** Quantity: Unknown

Polynuclear aromatic hydrocarbons

Volatile organic chemicals

Air Data Available: No SW Std Contravention: No GW Std Contravention: Yes Soil Type: Sediment Data Available: Yes GW Std Contravention: No DW Std Contravention: No SW Std Contravention: No Air Stand Contraventions: No

Legal Action Type: Not reported

State Legal Action: Yes Federal Legal Action: No Enforce Status Code: os Remedial Act Proposed: Yes Rem Act Under Design: No Rem Act In Progress: No Rem Act Completed: No

Remedial Action Type: Not reported

Glacial sands and Cretaceous clays Soil Type:

Depth To Groundwater: 15 ft. below surface, tidal zone MAP FINDINGS

Map ID Direction Distance Elevation

on Site Database(s) EPA ID Number

ALLIED PRINCE'S BAY (Continued)

S105973026

EDR ID Number

Owner Name:

Owner Address:

Owner City,St,Zip:

Owner Phone:

Owner Contact Name:

Owner During Disposal:

Not reported

Not reported

Not reported

Not reported

Owner During Use: S.S. White Manufacturing Co. Operator Name: S.S. White Manufacturing

Operator Address: Not reported Operator City, St, Zip: Not reported Operator Phone: Not reported Operator Contact Name: Not reported Oper During Disposal: Not reported Site Type: Not reported HW Disposal Period: Not reported Analytical Data Available: Not reported Applicable Std Exceeded: Not reported Geotech Info: Not reported Depth To Groundwater: Not reported Status: Not reported Nature Of Action: Not reported

Env Prob Assessment: A Phase I Remedial Investigation / Feasibility Study recommendedadditional sampling and investigation to characterize the sitecontamination has been

sampling and investigation to characterize the sitecontamination has been

completed. The Feasibility Study report is beingprepared.

Site Description: Not reported Confirmed HW: Not reported **Environment Assesment:** Not reported Health Assesment: Not reported Disposal Start Date: Not reported Not reported Disposal Term Date: Not reported Air Violation: Groundwater Violation: Not reported Drink Water Violation: Not reported Surface Water Violation: Not reported Not reported Legal New York State: Not reported Legal Federal: Not reported Legal State: Remedial Action Active: Not reported Remedial Action Done: Not reported NPL Status: Not reported Not reported Count Operator: Count Owner: Not reported NYTM X: Not reported NYTM Y: Not reported Not reported Co Name: Co Addr: Not reported Operator Addr: Not reported Operator Addr 2: Not reported Operator Addr 3: Not reported Operator Addr 4: Not reported HWDP From: Not reported From To: Not reported Assessment of Health: Not reported Not reported Description: Record Added Date: Not reported Record Updated Date: Not reported Env Assessment: Not reported Map ID Direction MAP FINDINGS

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ALLIED PRINCE'S BAY (Continued)

S105973026

HW Disposed/Quantity: Not reported Assess/Env Prog: Not reported Not reported Not reported Assess/Health Prob: Site Description:

Count: 2 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---------------|------------|---------------------|--------------------------------|-----|-------------|
| STATEN ISLAND | S126023815 | SOUTH AVE | BOUNDED BY TRAVIS AVE, SOUTH A | | SWF/LF |
| STATEN ISLAND | S126022585 | BAYONNE BRIDGE RAMP | NORTH SHORE OF STATEN ISLAND. | | SWF/LF |

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

Lists of Federal NPL (Superfund) sites

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: 04/27/2022 Source: EPA
Date Data Arrived at EDR: 05/05/2022 Telephone: N/A

Date Made Active in Reports: 05/31/2022 Last EDR Contact: 08/02/2022

Number of Days to Update: 26 Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 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: 04/27/2022 Source: EPA
Date Data Arrived at EDR: 05/05/2022 Telephone: N/A

> Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Number of Days to Update: 26

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.

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Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

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.

Source: EPA

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 26

Telephone: N/A Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

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: 05/25/2021 Date Data Arrived at EDR: 06/24/2021 Date Made Active in Reports: 09/20/2021

Number of Days to Update: 88

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 06/27/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 26

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 10/24/2022 Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

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SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 26

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 10/24/2022 Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 7

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

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: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 7

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

Lists of Federal RCRA generators

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: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 7

Source: Environmental Protection Agency Telephone: (212) 637-3660

Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

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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: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 7

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly 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). Very small quantity generators (VSQGs) generate
less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 7

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

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: 05/16/2022 Date Data Arrived at EDR: 05/19/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 71

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/03/2022

Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Varies

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: 05/16/2022 Date Data Arrived at EDR: 05/24/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 66

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 05/24/2022

Next Scheduled EDR Contact: 09/05/2022 Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

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: 05/16/2022 Date Data Arrived at EDR: 05/24/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 66

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 05/04/2022

Next Scheduled EDR Contact: 09/05/2022

Data Release Frequency: Varies

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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: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 06/21/2022

Number of Days to Update: 6

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 06/15/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

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: 05/09/2022 Date Data Arrived at EDR: 05/11/2022

Date Made Active in Reports: 08/01/2022 Number of Days to Update: 82 Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Annually

Lists of state and tribal landfills and solid waste disposal facilities

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: 03/29/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 06/24/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-8678 Last EDR Contact: 06/22/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/20/2021

Number of Days to Update: 90

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 04/28/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

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Date of Government Version: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/02/2022

Number of Days to Update: 83

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022

Data Release Frequency: Varies

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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 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

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021 Date Data Arrived at EDR: 11/05/2021 Date Made Active in Reports: 02/01/2022

Number of Days to Update: 88

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 06/29/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Varies

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: 03/21/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 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 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: 10/24/2005

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 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

Date of Government Version: 03/21/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

HAZ -126 TC7076628.2s Page GR-7

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: 03/21/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 03/21/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 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 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 AST: Major Oil Storage Facilities Database

 $Facilities \ that \ may \ be \ on shore \ facilities \ or \ vessels, \ with \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ vessels, \ with \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ vessels, \ when \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ vessels, \ when \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ capacities \ of \ 400,000 \ gallons \ or \ petroleum \ storage \ or \ petroleu$

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

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: 05/28/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/20/2021

Number of Days to Update: 90

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 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: 04/06/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022

Data Release Frequency: Varies

HAZ -127 TC7076628.2s Page GR-8

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: 10/14/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022

Data Release Frequency: Varies

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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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: 10/12/2021 Date Data Arrived at EDR: 11/15/2021 Date Made Active in Reports: 02/08/2022

Number of Days to Update: 85

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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TANKS: Storage Tank Faciliy 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: 03/21/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-9543 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

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: 02/16/2022 Date Data Arrived at EDR: 03/16/2022 Date Made Active in Reports: 06/10/2022

Number of Days to Update: 86

Source: NYC Department of City Planning

Telephone: 212-720-3401 Last EDR Contact: 06/14/2022

Next Scheduled EDR Contact: 09/26/2022 Data Release Frequency: Varies

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: 02/16/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 06/15/2022

Number of Days to Update: 85

Source: New York City Department of City Planning

Telephone: 212-720-3300 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 09/26/2022 Data Release Frequency: Varies

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Quarterly

Lists of 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.

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Date of Government Version: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-9711 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

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: 07/08/2021

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP NYC: Voluntary Cleanup Program Listing NYC New York City voluntary cleanup program sites.

> Date of Government Version: 03/07/2022 Date Data Arrived at EDR: 03/09/2022 Date Made Active in Reports: 06/03/2022

Number of Days to Update: 86

Source: New York City Office of Environmental Protection

Telephone: 212-788-8841 Last EDR Contact: 06/07/2022

Next Scheduled EDR Contact: 09/19/2022 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: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 06/15/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Varies

Lists of state and tribal brownfield sites

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: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-9764 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Semi-Annually

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: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Quarterly

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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: 02/23/2022 Date Data Arrived at EDR: 03/10/2022 Date Made Active in Reports: 03/10/2022

Number of Days to Update: 0

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 09/26/2022 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Registered Recycling Facility List A listing of recycling facilities.

Date of Government Version: 03/29/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 06/24/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-8678 Last EDR Contact: 06/22/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Quarterly

SWTIRE: Registered Waste Tire Storage & Facility List A listing of facilities registered to accept waste tires.

Date of Government Version: 02/27/2018 Date Data Arrived at EDR: 04/06/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 63

Source: Department of Environmental Conservation

Telephone: 518-402-8694 Last EDR Contact: 06/03/2022

Next Scheduled EDR Contact: 09/19/2022 Data Release Frequency: No Update Planned

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 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 07/21/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Varies

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 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 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.

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Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 07/12/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 07/21/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 04/30/2022 Date Data Arrived at EDR: 05/24/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 66

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 05/24/2022

Next Scheduled EDR Contact: 09/05/2022 Data Release Frequency: No Update Planned

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Quarterly

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.

Date of Government Version: 04/30/2022 Date Data Arrived at EDR: 05/24/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 66

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 05/24/2022

Next Scheduled EDR Contact: 09/05/2022 Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

DEC surveyed select businesses, fire departments, fire training centers, bulk storage facilities, airports, and Department of Defense (DoD) facilities. The responses to the survey have helped to determine if these entities used or stored materials containing PFOA/PFOS including AFFF and dispersants used in Teflon coating operations. The results of this survey will be updated periodically as additional responses are received..

Date of Government Version: 01/16/2019 Date Data Arrived at EDR: 05/08/2019 Date Made Active in Reports: 06/24/2019

Number of Days to Update: 47

Source: Department of Environmental Conservation

Telephone: 518-402-9020 Last EDR Contact: 05/16/2022

Next Scheduled EDR Contact: 08/15/2022

Data Release Frequency: Varies

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PFAS 2: New York State Inactive Landfill Initiative

A solid waste site priority list of mitigation and remedial activities to address sites causing, or substantially contributing to, impairments of drinking water quality. The primary focus is inactive solid waste disposal sites, primarily landfills, and their potential impact on New York?s drinking water resources from site-related contaminants, with a focus on emerging contaminants, including per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane.

Date of Government Version: 10/29/2021 Date Data Arrived at EDR: 11/19/2021 Date Made Active in Reports: 04/26/2022

Number of Days to Update: 158

Source: Department of Environmental Conservation

Telephone: 518-402-9662 Last EDR Contact: 08/01/2022

Next Scheduled EDR Contact: 11/14/2022 Data Release Frequency: Varies

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: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 05/03/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 07/26/2022

Number of Days to Update: 82

Source: Office of the State Comptroller

Telephone: 518-474-9034 Last EDR Contact: 07/27/2022

Next Scheduled EDR Contact: 11/14/2022 Data Release Frequency: Quarterly

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.

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 26

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HAZ -133 TC7076628.2s Page GR-14

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/21/2022 Date Data Arrived at EDR: 03/21/2022 Date Made Active in Reports: 06/14/2022

Number of Days to Update: 85

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

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: 05/09/2022 Date Data Arrived at EDR: 05/11/2022 Date Made Active in Reports: 08/02/2022

Number of Days to Update: 83

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 05/11/2022

Next Scheduled EDR Contact: 08/22/2022 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 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 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/12/2013

Number of Days to Update: 40

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 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

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

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: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 7

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

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: 05/11/2022 Date Data Arrived at EDR: 05/17/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 73

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 05/17/2022

Next Scheduled EDR Contact: 08/29/2022

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: 06/07/2021 Date Data Arrived at EDR: 07/13/2021 Date Made Active in Reports: 03/09/2022

Number of Days to Update: 239

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 07/13/2022

Next Scheduled EDR Contact: 10/24/2022

Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated 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: 04/02/2018 Date Data Arrived at EDR: 04/11/2018 Date Made Active in Reports: 11/06/2019

Number of Days to Update: 574

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 07/08/2022

Next Scheduled EDR Contact: 10/17/2022

Data Release Frequency: N/A

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: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 08/03/2022

Next Scheduled EDR Contact: 11/21/2022 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: 03/21/2022 Date Data Arrived at EDR: 03/21/2022 Date Made Active in Reports: 06/14/2022

Number of Days to Update: 85

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Quarterly

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: 07/29/2022

Next Scheduled EDR Contact: 11/14/2022 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: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 05/06/2022

Next Scheduled EDR Contact: 08/15/2022

Data Release Frequency: Varies

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: 12/31/2016 Date Data Arrived at EDR: 06/17/2020 Date Made Active in Reports: 09/10/2020

Number of Days to Update: 85

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 06/14/2022

Next Scheduled EDR Contact: 09/26/2022 Data Release Frequency: Every 4 Years

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: 12/31/2018 Date Data Arrived at EDR: 08/14/2020 Date Made Active in Reports: 11/04/2020

Number of Days to Update: 82

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 05/20/2022

Next Scheduled EDR Contact: 08/29/2022 Data Release Frequency: Annually

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: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 11

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 07/18/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Annually

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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: 04/27/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 26

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 09/12/2022 Data Release Frequency: Annually

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: 04/27/2022 Date Data Arrived at EDR: 05/04/2022 Date Made Active in Reports: 05/10/2022

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 07/14/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Varies

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.

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

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022 Date Data Arrived at EDR: 02/03/2022 Date Made Active in Reports: 02/25/2022

Number of Days to Update: 22

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 11/14/2022 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: 01/20/2022 Date Data Arrived at EDR: 01/20/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 64

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 07/08/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Annually

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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: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 06/28/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Quarterly

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: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

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: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

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: 03/11/2022 Date Data Arrived at EDR: 03/15/2022 Date Made Active in Reports: 06/14/2022

Number of Days to Update: 91

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 07/13/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 11/30/2021 Date Made Active in Reports: 02/22/2022

Number of Days to Update: 84

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 06/02/2022

Next Scheduled EDR Contact: 09/12/2022 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: 01/12/2017 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 251

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 05/25/2022

Next Scheduled EDR Contact: 09/12/2022

Data Release Frequency: Varies

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PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019 Date Data Arrived at EDR: 11/06/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 96

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 05/06/2022

Next Scheduled EDR Contact: 08/15/2022 Data Release Frequency: Varies

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: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 06/23/2022

Next Scheduled EDR Contact: 10/10/2022 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

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/17/2020

Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 07/21/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Quarterly

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.

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Date of Government Version: 03/31/2022 Date Data Arrived at EDR: 04/14/2022 Date Made Active in Reports: 07/12/2022

Number of Days to Update: 89

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 06/29/2022

Next Scheduled EDR Contact: 10/17/2022 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: 12/31/2019 Date Data Arrived at EDR: 03/02/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 23

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022 Data Release Frequency: Biennially

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.

than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Lindate: 546

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 07/08/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021 Date Data Arrived at EDR: 07/27/2021 Date Made Active in Reports: 10/22/2021

Number of Days to Update: 87

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 07/26/2022

Next Scheduled EDR Contact: 11/14/2022 Data Release Frequency: Varies

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: 08/30/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 74

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/16/2022

Next Scheduled EDR Contact: 08/29/2022 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 26

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 08/01/2022

Next Scheduled EDR Contact: 10/10/2022 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 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

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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

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: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

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: 05/02/2022 Date Data Arrived at EDR: 05/25/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 65

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 05/25/2022

Next Scheduled EDR Contact: 09/05/2022 Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022 Date Data Arrived at EDR: 03/22/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 09/12/2022 Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020 Date Data Arrived at EDR: 05/27/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 78

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 05/27/2022

Next Scheduled EDR Contact: 09/05/2022

Data Release Frequency: Varies

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US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 05/27/2022

Next Scheduled EDR Contact: 09/05/2022 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/10/2022 Date Data Arrived at EDR: 03/10/2022 Date Made Active in Reports: 06/14/2022

Number of Days to Update: 96

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 06/14/2022

Next Scheduled EDR Contact: 09/19/2022 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: 05/13/2022 Date Data Arrived at EDR: 05/18/2022 Date Made Active in Reports: 05/31/2022

Number of Days to Update: 13

Source: EPA Telephone: (212) 637-3000 Last EDR Contact: 05/18/2022

Next Scheduled EDR Contact: 09/12/2022 Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/02/2022 Date Data Arrived at EDR: 04/05/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 07/01/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 01/11/2022 Date Made Active in Reports: 02/14/2022

Number of Days to Update: 34

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 07/07/2022

Next Scheduled EDR Contact: 10/24/2022 Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

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Date of Government Version: 05/06/2021 Date Data Arrived at EDR: 05/21/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 05/19/2022

Next Scheduled EDR Contact: 09/05/2022 Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels

Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/16/2022 Date Data Arrived at EDR: 05/17/2022 Date Made Active in Reports: 07/29/2022

Number of Days to Update: 73

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 05/17/2022

Next Scheduled EDR Contact: 08/29/2022 Data Release Frequency: Quarterly

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 01/31/2022 Date Data Arrived at EDR: 02/01/2022 Date Made Active in Reports: 02/10/2022

Number of Days to Update: 9

Source: Department of Environmental Conservation

Telephone: 518-402-8452 Last EDR Contact: 07/14/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 03/28/2022 Date Data Arrived at EDR: 03/30/2022 Date Made Active in Reports: 06/24/2022

Number of Days to Update: 86

Source: Department of Environmental Conservation

Telephone: 518-402-8660 Last EDR Contact: 06/22/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Quarterly

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 03/07/2022 Date Data Arrived at EDR: 03/10/2022 Date Made Active in Reports: 06/03/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-8403 Last EDR Contact: 06/03/2022

Next Scheduled EDR Contact: 09/19/2022 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: 03/22/2022 Date Data Arrived at EDR: 06/22/2022 Date Made Active in Reports: 06/28/2022

Number of Days to Update: 6

Source: New York City Department of City Planning

Telephone: 718-595-6658 Last EDR Contact: 06/13/2022

Next Scheduled EDR Contact: 09/26/2022 Data Release Frequency: Semi-Annually

Financial Assurance 1: Financial Assurance Information Listing Financial assurance information.

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Date of Government Version: 03/29/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 06/24/2022

Number of Days to Update: 85

Source: Department of Environmental Conservation

Telephone: 518-402-8660 Last EDR Contact: 07/07/2022

Next Scheduled EDR Contact: 10/10/2022 Data Release Frequency: Quarterly

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.

Date of Government Version: 06/11/2020 Date Data Arrived at EDR: 06/16/2020 Date Made Active in Reports: 09/02/2020

Number of Days to Update: 78

Source: Department of Environmental Conservation

Telephone: 518-402-8712 Last EDR Contact: 06/03/2022

Next Scheduled EDR Contact: 09/19/2022 Data Release Frequency: Varies

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

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: 01/01/2019 Date Data Arrived at EDR: 10/29/2021 Date Made Active in Reports: 01/19/2022

Number of Days to Update: 82

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 07/29/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Quarterly

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: 03/25/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 05/18/2022

Number of Days to Update: 13

Source: Department of Environmental Conservation

Telephone: 518-402-8233 Last EDR Contact: 07/14/2022

Next Scheduled EDR Contact: 10/31/2022 Data Release Frequency: No Update Planned

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.

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Date of Government Version: 01/01/2022 Date Data Arrived at EDR: 02/08/2022 Date Made Active in Reports: 05/06/2022

Number of Days to Update: 87

Source: Department of Environmenal Conservation

Telephone: 518-402-9814 Last EDR Contact: 05/13/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: Varies

UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 02/27/2022 Date Data Arrived at EDR: 03/01/2022 Date Made Active in Reports: 05/27/2022

Number of Days to Update: 87

Source: Department of Environmental Conservation

Telephone: 518-402-8056 Last EDR Contact: 05/31/2022

Next Scheduled EDR Contact: 09/12/2022 Data Release Frequency: Quarterly

COOLING TOWERS: Registered Cooling Towers

This data includes the location of cooling towers registered with New York State. The data is self-reported by owners/property managers of cooling towers in service in New York State. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York

Date of Government Version: 04/05/2022 Date Data Arrived at EDR: 04/13/2022 Date Made Active in Reports: 07/08/2022

Number of Days to Update: 86

Source: Department of Health Telephone: 518-402-7650 Last EDR Contact: 07/12/2022

Next Scheduled EDR Contact: 10/24/2022

Data Release Frequency: Varies

NYC LEAD 2: Recent Lead Paint Violations

Pursuant to New York City?s Housing Maintenance Code, the Department of Housing Preservation and Development (HPD) issues violations against conditions in rental dwelling units that have been verified to violate the New York City Housing Maintenance Code (HMC) or the New York State Multiple Dwelling Law (MDL). Violations are issued when an inspection verifies that a violation of the HMC or MDL exists. It is closed when the violation is corrected, as observed/verified by HPD or as certified by the landlord.

Date of Government Version: 04/25/2022 Date Data Arrived at EDR: 05/04/2022 Date Made Active in Reports: 07/26/2022

Number of Days to Update: 83

Source: New York City Department of Housing Preservation & Development

Telephone: 212-863-8200 Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 11/14/2022

Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011 Date Data Arrived at EDR: 08/05/2011 Date Made Active in Reports: 09/29/2011

Number of Days to Update: 55

Source: EPA, Office of Water Telephone: 202-564-2496 Last EDR Contact: 06/28/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014 Date Data Arrived at EDR: 01/06/2015 Date Made Active in Reports: 05/06/2015

Number of Days to Update: 120

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 06/28/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Semi-Annually

HAZ -145 TC7076628.2s Page GR-26

NYC LEAD: Lead-based Paint Testing Results

The results of the inspections for all classrooms serving students under six in applicable buildings. Identifies all classrooms, whether there was observation of peeling paint, and if there was, standard response protocol was followed.

Date of Government Version: 04/04/2022 Date Data Arrived at EDR: 05/04/2022 Date Made Active in Reports: 07/26/2022

Number of Days to Update: 83

Source: New York City Department of Education

Telephone: 212-374-5141 Last EDR Contact: 05/04/2022

Next Scheduled EDR Contact: 08/15/2022 Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533 Last EDR Contact: 05/27/2022

Next Scheduled EDR Contact: 09/05/2022

Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 02/05/2015 Date Made Active in Reports: 03/06/2015

Number of Days to Update: 29

Source: EPA

Telephone: 202-564-2497 Last EDR Contact: 06/28/2022

Next Scheduled EDR Contact: 10/17/2022

Data Release Frequency: Varies

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.

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 Hist Auto: EDR Exclusive Historical Auto 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

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EDR Hist Cleaner: EDR Exclusive Historical 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 Source: EDR, Inc. Date Data Arrived at EDR: N/A Telephone: N/A Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: 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

COUNTY RECORDS

CORTLAND COUNTY:

AST - CORTLAND: Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 08/20/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/16/2019

Number of Days to Update: 57

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Quarterly

UST - CORTLAND: Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 08/20/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/16/2019

Number of Days to Update: 57

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Quarterly

NASSAU COUNTY:

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AST - NASSAU: Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 08/03/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: No Update Planned

AST NCFM: Storage Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011 Date Data Arrived at EDR: 02/23/2011 Date Made Active in Reports: 03/29/2011

Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022

Data Release Frequency: Varies

TANKS NASSAU: Registered Tank Database in Nassau County A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Department of Health

Telephone: 516-227-9691 Last EDR Contact: 08/03/2022

Next Scheduled EDR Contact: 11/07/2022

Data Release Frequency: Varies

UST - NASSAU: Registered Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 08/03/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: No Update Planned

UST NCFM: Storage Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011 Date Data Arrived at EDR: 02/23/2011 Date Made Active in Reports: 03/29/2011

Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Varies

ROCKLAND COUNTY:

AST - ROCKLAND: Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 189

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 05/26/2022

Next Scheduled EDR Contact: 09/12/2022 Data Release Frequency: No Update Planned

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UST - ROCKLAND: Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 09/22/2017 Number of Days to Update: 189 Source: Rockland County Health Department Telephone: 914-364-2605 Last EDR Contact: 05/26/2022 Next Scheduled EDR Contact: 09/12/2022

Next Scheduled EDR Contact: 09/12/2022

Data Release Frequency: No Update Planned

SUFFOLK COUNTY:

AST - SUFFOLK: Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018 Date Data Arrived at EDR: 12/06/2018 Date Made Active in Reports: 02/07/2019

Number of Days to Update: 63

Source: Suffolk County Department of Health Services Telephone: 631-854-2521

Telephone: 631-854-2521 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: No Update Planned

TANKS SUFFOLK: Storage Tank Database

This county is not included in the state?s database. These are facilities that have no tank information in the storage tank database.

Date of Government Version: 06/28/2018 Date Data Arrived at EDR: 02/05/2019 Date Made Active in Reports: 03/08/2019

Number of Days to Update: 31

Source: Department of Health Services

Telephone: 631-854-2516 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Varies

UST - SUFFOLK: Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018 Date Data Arrived at EDR: 12/06/2018 Date Made Active in Reports: 02/07/2019

Number of Days to Update: 63

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

AST - WESTCHESTER: Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 04/12/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 81

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Semi-Annually

UST - WESTCHESTER: Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 04/12/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 08/01/2022

Number of Days to Update: 81

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 07/19/2022

Next Scheduled EDR Contact: 11/07/2022 Data Release Frequency: Semi-Annually

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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: 05/08/2022 Date Data Arrived at EDR: 05/09/2022 Date Made Active in Reports: 07/28/2022

Number of Days to Update: 80

Source: Department of Energy & Environmental Protection Telephone: 860-424-3375 Last EDR Contact: 05/09/2022

Next Scheduled EDR Contact: 08/22/2022 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019

Number of Days to Update: 36

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 06/28/2022

Next Scheduled EDR Contact: 10/17/2022 Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/19/2019 Date Made Active in Reports: 09/10/2019

Number of Days to Update: 53

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 07/06/2022

Next Scheduled EDR Contact: 10/24/2022 Data Release Frequency: Annually

RI MANIFEST: Manifest information Hazardous waste manifest information

> Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 11/30/2021 Date Made Active in Reports: 02/18/2022

Number of Days to Update: 80

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 05/16/2022

Next Scheduled EDR Contact: 08/29/2022 Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.

Date of Government Version: 10/28/2019 Date Data Arrived at EDR: 10/29/2019 Date Made Active in Reports: 01/09/2020

Number of Days to Update: 72

Source: Department of Environmental Conservation

Telephone: 802-241-3443 Last EDR Contact: 07/12/2022

Next Scheduled EDR Contact: 10/24/2022 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/03/2022

Next Scheduled EDR Contact: 09/19/2022 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

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Electric Power Transmission Line Data

Source: Endeavor Business Media

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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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

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

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

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STREET AND ADDRESS INFORMATION

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APPENDIX C GEOLOGIC BORING LOGS

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Work Order Letter No.OEHS-20201409798-WOL-231

| | | | 1 | Lik | Ro . | Engi | ineers, | Inc. | | TEST BOF | RING L | OG |
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| | | | | | | O | , | | | BORING NO: | SB-01 | |
| PROJECT | | | | | | • | • | ot Avenue and Sw
ue, Staten Island, | | SHEET: | 1 of | : 1 |
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ental Services, | | | LOCATION: | Huguen | |
| GROUND | | | | ASSU | cialeu | LIMIOIIII | CAS. | SAMPLER | TUBE | GROUND ELEVATION: | NA | ot Ave. |
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| | | | | | | FALL | | | | GEOLOGIST: | • | ubowska |
| | | | | | | FALL | | | | REVIEWED BY: | Jon Wil | |
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| DEPTH | | "S" | INPLE | DI. | OWS | REC% | | CONSISTENCY | DESCRI | MATERIAL | USCS | DEMARKS |
| | CTDATA | | | | | | COLOD | | | | USCS | REMARKS |
| FEET | STRATA | NO. | NO. | PE | R 6" | RQD% | COLOR | HARDNESS | | DESCRIPTION | | |
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| | • | | | | | | Reddish- | | 0.001.5 | | 014 | Hand cleared to 6 ftbg |
| | 1 | | | | | NA | brown | NA | 0-6.0°: F | ine Sand, trace of silt, trace of gravel. | GM | PID: 0.0 ppm
Dry |
| | | | | | | | | | | | | 2.19 |
| | 1711 | | | | | 1 | | | | | | |
| 6 | 20202020 | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | 50% | Reddish- | Dense | 6.0-10 | 0': Fine to medium Sand and gravel. | | PID: 0.0 ppm |
| | | | | | | 0070 | brown | Bonico | 0.0 10. | o . I mo to modiam cana ana gravo. | | Dry |
| 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | sw | |
| | | | | | | | Reddish- | | | | 300 | PID: 0.0 ppm |
| | | | | | | 70% | brown | Medium loose | 10.0-15 | .0': Fine to medium Sand and gravel. | | Moist |
| | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |
| | | | | | | | Reddish- | | | | | PID: 0.0 ppm |
| 17 | | | | | | 40% | brown | Medium loose | 15.0-20 | .0': Fine to medium Sand and gravel. | | Moist |
| | ł | | | | | | | | | End of Boring at 17 ftbg | | |
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| 20 | ł | | | | | | | | <u></u> | | | |
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| | | | | | | Ü | | | | BORING NO: | SB-02 | |
| PROJECT | | | | | | | | t Avenue and Sw
ue, Staten Island, | | SHEET: | 1 of | : 1 |
| CLIENT: | | Departr | ment of | Desic | n and | Construct | tion - SANDHW | /SIR | | JOB NO.: | 19-294-0 | |
| BORING (| CONTRAC | | | | | | ental Services, | | | LOCATION: | Swaim A | |
| GROUND | | | | A3300 | cialeu | LIIVIIOIIIII | CAS. | SAMPLER | TUBE | GROUND ELEVATION: | NA | Ave. |
| | | | | _ | | | CAS. | SAWFLER | TUBE | | | |
| DATE | TIME | LEV | /EL | | /PE | TYPE | | | | DATE STARTED: | | r 27, 2022 |
| | | | | | NΑ | DIA. | | | | DATE FINISHED: | | r 27, 2022 |
| | | | | <u> </u> | | WT. | | | | DRILLER: | Dylan J | |
| | | | | ├ | | FALL | | | | GEOLOGIST: | | ubowska |
| | | | | | | <u> </u> | | | | REVIEWED BY: | Jon Wil | liams |
| | | | MPLE | | | | | | DESCRI | | | |
| DEPTH | | "S" | "N" | BLO | OWS | REC% | | CONSISTENCY | | MATERIAL | USCS | REMARKS |
| FEET | STRATA | NO. | NO. | PE | R 6" | RQD% | COLOR | HARDNESS | | DESCRIPTION | | |
| 1 | | | | | | - | | | | | | |
| | /// / //// | | | | | NA | Dark brown | NA | 0-6.0': Fi | ne to medium Sand, some clay, some gravel. | | Hand cleared to 6 ftbg
PID: 0.0 ppm
Moist |
| | / • / • / | | | | | <u> </u> | | | | | | IVIOISE |
| 6 | | | | | | | | | | | 1 | |
| | ////// | | | | | 100% | Reddish-
brown | Dense | 6.0-10.0 | o': Fine to medium Sand, trace of clay and gravel. | GC | PID: 0.0 ppm
Moist |
| 10 | / • // • // | | | | | - | | | | | 1 | |
| | | | | | <u> </u> | - | | | | | | |
| | | | | | | 60% | Reddish-
brown | Dense | 10.0-15.0 | 0': Fine to medium Sand, trace of clay and gravel. | | PID: 0.0 ppm
Moist |
| 15 | <u>/////</u> | | | | | - | | | | | | |
| 17 | | | | | | 30% | Reddish-
brown | Medium loose | 15.0-20 | .0': Fine to medium Sand and gravel. | SW | PID: 0.0 ppm
Moist |
| | | | | | | | | | | End of Boring at 17 ftbg | | |
| 20 | | | | | | | | | | | J | |
| |] | | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
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| 30 | 1 | | | | | | | | | | | |
| COMMEN | TS: | Grah sa | amples | collec | ted @ | 0-2 0 fthc | and 16.5-17.0 | ftbg. Composite | sample | PROJECT NO.: 19-294-0265.01 | | |
| | | | | | | | | ified Soil Classif | | BORING NO.: SB-02 | | |
| System (U | | 9. 0 | | | | | | | | | | |
| - Joseph (O | j. | | | | | | | | | | | |



APPENDIX D LABORATORY ANALYTICAL RESULTS

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Work Order Letter No.OEHS-20201409798-WOL-231



DATA FOR

VOLATILE ORGANICS SEMI-VOLATILE ORGANICS GC SEMI-VOLATILES METALS GENERAL CHEMISTRY

PROJECT NAME: DDC OEGS - ROADWAY IMPROVEMENT IN SWAIM

LIRO ENGINEERS, INC. 690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID: N5336

ATTENTION: Steve Frank









Date: 11/03/2022

Dear Steve Frank,

1 water and 7 soil samples for the DDC OEGS - Roadway Improvement in Swaim project were received on 10/27/2022. The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns

Regards,

Samantha Beazley

Samantha@chemtech.net



284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 • Fax (908) 789-8922 www.chemtech.net

| CHEMTECH PRO | DJECT NO. |
|--------------|-----------|
| QUOTE NO. | 110 286 |

COC Number

2036784

| | CLIENT INFORMATION | 200 | | | ROJECT IN | | | - | 10 | 103.5 | 172 | v, i | CLIEN | IT BILLI | NG INFO | PRMATION | P KINDS |
|--|---|--------------------------------------|-------------------------------|--------------------------|-----------------------|------------|---------------------|----------|----------|----------|---------------------|-----------------|--------------|----------|---------|-----------------|------------------|
| - | L'EO Engineers, Inc. D3 Lorimer Sheet | PROJECT
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94 - 6 | prover
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Uen | of 1 | tue. | Isla | | | | S | am. | 0 | PO#: | |
| ADDRESS: 1 | | | | | | - | V | | 23,91 | | | | | 3111 | | | 710 |
| | oklem STATE:NY ZIP: 1/2/1 | PROJECT | | | 1. 7 | | | la | | CITY | Tim | CC | MIL | | STAT | | ZIP: |
| ATTENTION: | Steve Frank | e-mail: | rank | SC | 1110, (| OM | 11 | ews | onu | AFTEN | MION: | . 00 | | | PHO | - | 4 15 |
| PHONE: 76 | 882-5476 FAX: | PHONE: | 16 8 | 85-2 | 476 FA | X: | / | | | | | | | ANA | ALYSIS | 3 | 5,400 |
| The state of the s | DATA TURNAROUND INFORMATION | | | | RABLE IN | | | | | | | | | 9 | | 11/2 | Til |
| | DAYS* ATA PACKAGE): DAYS* DAYS* VED BY CHEMTECH RDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS | Level 1 Level 2 Level 3 + Raw EDD FO | (Results
(Results
Data) | + QC) 🗆
+ QC 📮 | | U 💷 U | S EPA CL
S ASP B | .P / | 31/3 | PRES | QUS
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| CHEMTECH | ************************************** | | AMPLE
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ECTION | BOTTLES | 1 | | | 11120 | | 11120 | | | | ← Speci | fy Preservatives |
| SAMPLE | PROJECT SAMPLE IDENTIFICATION | SHIMIT LL | GRAB | DATE | TIME | OF BOT | C- | | | | | | | Y | | A-HCI
B-HN03 | D-NaOH
E-ICE |
| 10 | | | 8 5 | | | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | C-H2SO4 | F-OTHER |
| 1. | 3B-01-0-2.0' | 9 | X | 10/27/ | 2 0900 | 5 | \times | X | \times | \times | \times | | | | | | |
| 2. | 5B-01-16.5-17.0 | S | X | | 0910 | 3 | \times | \times | \times | \times | \geq | | | | | | |
| 3. | SB-01-16.5-17.0' DUP | 5 | X | | 0910 | 3 | \times | \times | \geq | \times | \times | | | | | | |
| 4. | SB-01- COMP | 5 | | | 0915 | 3 | | | | | | X | X | X | | | |
| 5. | 56-02-0-2.0' | 5 | X | | 1030 | 3 | X | \times | \times | \times | \times | | | | | | |
| 6. | SB-02-16,5-17.0 | 5 | ΪX | | 1035 | 3 | X | X | X | X | $\overline{\times}$ | | | | | | |
| 7. | SB-O2-COMP | 5 > | | V | 1040 | 3 | | | | | | X | X | X | | | |
| 8. | Trip Blank#1 | DI | X | | | 2 | X | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |
| | SAMPLE CUSTODY MUST BE DOC | | | | | _ | | | | | | | | | Y | | Empire |
| 1. WO RELINQUISHED B | 2. | #1 | 14a
0:27 | Condit | ons of bottles | or coole | | | | | | | COOLER 1 | EMP | 5 | /) | °C |
| RELINION HED B | y SAMPLER: DATE/TIME: 170 RECEIVED BY: | 15 | | Page | HAZ _{of} 1: | 59 | CLIENT | | Hand De | | □ O | ther
ld Samp | oling | | | | nt Complete |

YELLOW - CHEMTECH COPY

PINK - SAMPLER COPY

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-01-0-2.0N5336 Lab Sample ID: N5336-01 Matrix: SOIL Level (low/med): % Solid: 85.2 low

| Cas | Parameter | Conc. | Qua | . D | F MDL | LOQ / CRQL | Units(Dry Weight |) Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|-----|-----|--------|------------|------------------|----------------|----------------|----------|
| 7429-90-5 | Aluminum | 3040 | | 1 | 2.13 | 4.81 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-36-0 | Antimony | 0.44 | JN | 1 | 0.26 | 2.41 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-38-2 | Arsenic | 0.71 | JN | 1 | 0.20 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-39-3 | Barium | 84.1 | | 1 | 0.69 | 4.81 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-41-7 | Beryllium | 0.41 | | 1 | 0.020 | 0.29 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-43-9 | Cadmium | 0.081 | J | 1 | 0.026 | 0.29 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-70-2 | Calcium | 773 | | 1 | 6.87 | 96.2 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-47-3 | Chromium | 6.99 | | 1 | 0.087 | 0.48 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-48-4 | Cobalt | 4.99 | N | 1 | 0.072 | 1.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-50-8 | Copper | 8.12 | | 1 | 0.40 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7439-89-6 | Iron | 13200 | | 1 | 3.78 | 4.81 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7439-92-1 | Lead | 5.49 | | 1 | 0.25 | 0.58 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7439-95-4 | Magnesium | 2170 | | 1 | 8.76 | 96.2 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7439-96-5 | Manganese | 342 | | 1 | 0.11 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7439-97-6 | Mercury | 0.026 | | 1 | 0.0030 | 0.014 | mg/Kg | 10/28/22 13:05 | 10/31/22 12:40 | SW7471B |
| 7440-02-0 | Nickel | 10.2 | N | 1 | 0.17 | 1.92 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-09-7 | Potassium | 545 | | 1 | 22.4 | 96.2 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7782-49-2 | Selenium | 0.41 | UN | 1 | 0.41 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-22-4 | Silver | 0.16 | J | 1 | 0.075 | 0.48 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-23-5 | Sodium | 127 | | 1 | 22.5 | 96.2 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-28-0 | Thallium | 0.30 | U | 1 | 0.30 | 1.92 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-62-2 | Vanadium | 11.9 | | 1 | 0.31 | 1.92 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |
| 7440-66-6 | Zinc | 22.6 | N | 1 | 0.21 | 1.92 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:04 | SW6010 |

| Color Before: | Clarity Before: | Texture: |
|---------------|-----------------|------------|
| Color After: | Clarity After: | Artifacts: |

Comments: METALS-TAL

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAZ - 160Spiked sample recovery not within control limits



Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-01-0-2.0 N5336 Lab Sample ID: N5336-01 Matrix: **SOIL**

Analytical Method: SW8082A % Moisture: 14.8 Decanted: Sample Wt/Vol: 30.01 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: PCB

Extraction Type: Injection Volume :

GPC Factor: 1.0 PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 PO090058.D
 1
 10/31/22 08:30
 11/01/22 10:28
 PB148680

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 12674-11-2 | Aroclor-1016 | 3.60 | U | 3.60 | 19.9 | ug/kg |
| 11104-28-2 | Aroclor-1221 | 5.50 | U | 5.50 | 19.9 | ug/kg |
| 11141-16-5 | Aroclor-1232 | 4.60 | U | 4.60 | 19.9 | ug/kg |
| 53469-21-9 | Aroclor-1242 | 2.80 | U | 2.80 | 19.9 | ug/kg |
| 12672-29-6 | Aroclor-1248 | 3.50 | U | 3.50 | 19.9 | ug/kg |
| 11097-69-1 | Aroclor-1254 | 4.90 | U | 4.90 | 19.9 | ug/kg |
| 37324-23-5 | Aroclor-1262 | 3.90 | U | 3.90 | 19.9 | ug/kg |
| 11100-14-4 | Aroclor-1268 | 6.70 | U | 6.70 | 19.9 | ug/kg |
| 11096-82-5 | Aroclor-1260 | 3.80 | U | 3.80 | 19.9 | ug/kg |
| SURROGATES | | | | | | |
| 877-09-8 | Tetrachloro-m-xylene | 26.3 | | 40 - 162 | 131% | SPK: 20 |
| 2051-24-3 | Decachlorobiphenyl | 24.7 | | 32 - 176 | 124% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Extraction Type:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: Date Received: DDC OEGS - Roadway Improvement in Swaim 10/27/22 Client Sample ID: SB-01-0-2.0 SDG No.: N5336 Lab Sample ID: N5336-01 Matrix: SOIL Analytical Method: SW8081 % Moisture: 14.8 Decanted: Sample Wt/Vol: 30.01 Final Vol: 10000 uL Units: g Pesticide-TCL Soil Aliquot Vol: uL Test:

Injection Volume:

GPC Factor: 1.0 PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 PL078670.D
 1
 10/31/22 08:30
 10/31/22 21:19
 PB148681

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 319-84-6 | alpha-BHC | 0.22 | U | 0.22 | 2.00 | ug/kg |
| 319-85-7 | beta-BHC | 0.40 | U | 0.40 | 2.00 | ug/kg |
| 319-86-8 | delta-BHC | 0.47 | U | 0.47 | 2.00 | ug/kg |
| 58-89-9 | gamma-BHC (Lindane) | 0.18 | U | 0.18 | 2.00 | ug/kg |
| 76-44-8 | Heptachlor | 0.22 | U | 0.22 | 2.00 | ug/kg |
| 309-00-2 | Aldrin | 0.20 | U | 0.20 | 2.00 | ug/kg |
| 1024-57-3 | Heptachlor epoxide | 0.28 | U | 0.28 | 2.00 | ug/kg |
| 959-98-8 | Endosulfan I | 0.16 | U | 0.16 | 2.00 | ug/kg |
| 60-57-1 | Dieldrin | 0.18 | U | 0.18 | 2.00 | ug/kg |
| 72-55-9 | 4,4-DDE | 0.19 | U | 0.19 | 2.00 | ug/kg |
| 72-20-8 | Endrin | 0.20 | U | 0.20 | 2.00 | ug/kg |
| 33213-65-9 | Endosulfan II | 0.36 | U | 0.36 | 2.00 | ug/kg |
| 72-54-8 | 4,4-DDD | 0.22 | U | 0.22 | 2.00 | ug/kg |
| 1031-07-8 | Endosulfan Sulfate | 0.21 | U | 0.21 | 2.00 | ug/kg |
| 50-29-3 | 4,4-DDT | 0.21 | U | 0.21 | 2.00 | ug/kg |
| 72-43-5 | Methoxychlor | 0.23 | U | 0.23 | 2.00 | ug/kg |
| 53494-70-5 | Endrin ketone | 0.28 | U | 0.28 | 2.00 | ug/kg |
| 7421-93-4 | Endrin aldehyde | 0.41 | U | 0.41 | 2.00 | ug/kg |
| 5103-71-9 | alpha-Chlordane | 0.15 | U | 0.15 | 2.00 | ug/kg |
| 5103-74-2 | gamma-Chlordane | 0.16 | U | 0.16 | 2.00 | ug/kg |
| 8001-35-2 | Toxaphene | 7.00 | U | 7.00 | 38.7 | ug/kg |
| SURROGATES | | | | | | |
| 2051-24-3 | Decachlorobiphenyl | 25.2 | | 12 - 143 | 126% | SPK: 20 |
| 877-09-8 | Tetrachloro-m-xylene | 23.4 | | 10 - 159 | 117% | SPK: 20 |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project:

DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID:

SB-01-0-2.0

SDG No.:

Lab Sample ID:

Date Received:

N5336

N5336-01 SW8081

Matrix:

SOIL

Analytical Method:

% Moisture: Final Vol:

14.8

Decanted: иL

Sample Wt/Vol: Soil Aliquot Vol: 30.01 Units: g

10000

иL

Test:

Pesticide-TCL

Extraction Type:

1.0

PH:

Injection Volume:

GPC Factor:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

PL078670.D

File ID/Qc Batch:

10/31/22 08:30

10/31/22 21:19

PB148681

CAS Number

Parameter

Conc.

Qualifier MDL

LOQ / CRQL

Units

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Sample Wt/Vol:

30.04

Units:

g

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-0-2.0 SDG No.: N5336

Lab Sample ID: N5336-01 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 14.8

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037295.D 1 10/31/22 09:10 10/31/22 18:21 PB148683

| DIVI03/293.D | I | 10/31/22 | 09.10 | 10/31/22 16.21 | FD140003 | |
|--------------|-----------------------------|----------|---------------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| TARGETS | | | | | | |
| 100-52-7 | Benzaldehyde | 170 | U | 170 | 390 | ug/Kg |
| 108-95-2 | Phenol | 79.4 | U | 79.4 | 200 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 94.1 | U | 94.1 | 200 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 80.1 | U | 80.1 | 200 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 130 | U | 130 | 200 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 110 | U | 110 | 200 | ug/Kg |
| 98-86-2 | Acetophenone | 93.9 | U | 93.9 | 200 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 110 | U | 110 | 390 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 89.2 | U | 89.2 | 200 | ug/Kg |
| 67-72-1 | Hexachloroethane | 86.4 | U | 86.4 | 200 | ug/Kg |
| 98-95-3 | Nitrobenzene | 86.6 | U | 86.6 | 200 | ug/Kg |
| 78-59-1 | Isophorone | 78.1 | U | 78.1 | 200 | ug/Kg |
| 88-75-5 | 2-Nitrophenol | 110 | U | 110 | 200 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 120 | U | 120 | 200 | ug/Kg |
| 111-91-1 | bis(2-Chloroethoxy)methane | 130 | U | 130 | 200 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 95.8 | U | 95.8 | 200 | ug/Kg |
| 91-20-3 | Naphthalene | 86.6 | U | 86.6 | 200 | ug/Kg |
| 106-47-8 | 4-Chloroaniline | 110 | U | 110 | 200 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 120 | U | 120 | 200 | ug/Kg |
| 105-60-2 | Caprolactam | 120 | U | 120 | 390 | ug/Kg |
| 59-50-7 | 4-Chloro-3-methylphenol | 92.2 | U | 92.2 | 200 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 87.9 | U | 87.9 | 200 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 200 | U | 200 | 390 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 100 | U | 100 | 200 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 98.0 | U | 98.0 | 200 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 100 | U | 100 | 200 | ug/Kg |
| 91-58-7 | 2-Chloronaphthalene | 100 | U | 100 | 200 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 130 | U | 130 | 200 | ug/Kg |
| 131-11-3 | Dimethylphthalate | 94.8 | U | 94.8 | 200 | ug/Kg |
| 208-96-8 | Acenaphthylene | 80.5 | U | 80.5 | 200 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 91.5 | U
HAZ -164 | 91.5 | 200 | ug/Kg |



30.04

Units:

g

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-0-2.0 SDG No.: N5336 SOIL Lab Sample ID: N5336-01 Matrix:

Analytical Method: SW8270 % Moisture: 14.8 Sample Wt/Vol: Final Vol:

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

1000

uL

Extraction Type: Level: Decanted: N LOW

GPC Factor: 1.0 GPC Cleanup: Ν PH: Injection Volume:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037295.D 1 10/31/22 09:10 10/31/22 18:21 PB148683

| DM103/293.D | 1 | 10/31/22 | 09.10 | 10/31/22 18.21 | PD146063 | |
|-------------|----------------------------|----------|----------------------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| 99-09-2 | 3-Nitroaniline | 120 | U | 120 | 200 | ug/Kg |
| 83-32-9 | Acenaphthene | 92.5 | U | 92.5 | 200 | ug/Kg |
| 51-28-5 | 2,4-Dinitrophenol | 150 | U | 150 | 390 | ug/Kg |
| 100-02-7 | 4-Nitrophenol | 160 | U | 160 | 390 | ug/Kg |
| 132-64-9 | Dibenzofuran | 87.0 | U | 87.0 | 200 | ug/Kg |
| 121-14-2 | 2,4-Dinitrotoluene | 99.2 | U | 99.2 | 200 | ug/Kg |
| 84-66-2 | Diethylphthalate | 94.4 | U | 94.4 | 200 | ug/Kg |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 110 | U | 110 | 200 | ug/Kg |
| 86-73-7 | Fluorene | 92.4 | U | 92.4 | 200 | ug/Kg |
| 100-01-6 | 4-Nitroaniline | 120 | U | 120 | 200 | ug/Kg |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 100 | U | 100 | 390 | ug/Kg |
| 86-30-6 | n-Nitrosodiphenylamine | 96.4 | U | 96.4 | 200 | ug/Kg |
| 101-55-3 | 4-Bromophenyl-phenylether | 120 | U | 120 | 200 | ug/Kg |
| 118-74-1 | Hexachlorobenzene | 120 | U | 120 | 200 | ug/Kg |
| 1912-24-9 | Atrazine | 110 | U | 110 | 200 | ug/Kg |
| 87-86-5 | Pentachlorophenol | 140 | U | 140 | 390 | ug/Kg |
| 85-01-8 | Phenanthrene | 98.0 | U | 98.0 | 200 | ug/Kg |
| 120-12-7 | Anthracene | 98.5 | U | 98.5 | 200 | ug/Kg |
| 86-74-8 | Carbazole | 98.7 | U | 98.7 | 200 | ug/Kg |
| 84-74-2 | Di-n-butylphthalate | 100 | U | 100 | 200 | ug/Kg |
| 206-44-0 | Fluoranthene | 93.5 | U | 93.5 | 200 | ug/Kg |
| 129-00-0 | Pyrene | 87.0 | U | 87.0 | 200 | ug/Kg |
| 85-68-7 | Butylbenzylphthalate | 96.9 | U | 96.9 | 200 | ug/Kg |
| 91-94-1 | 3,3-Dichlorobenzidine | 160 | U | 160 | 390 | ug/Kg |
| 56-55-3 | Benzo(a)anthracene | 100 | U | 100 | 200 | ug/Kg |
| 218-01-9 | Chrysene | 100 | U | 100 | 200 | ug/Kg |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 100 | U | 100 | 200 | ug/Kg |
| 117-84-0 | Di-n-octyl phthalate | 110 | U | 110 | 390 | ug/Kg |
| 205-99-2 | Benzo(b)fluoranthene | 80.9 | U | 80.9 | 200 | ug/Kg |
| 207-08-9 | Benzo(k)fluoranthene | 86.3 | U | 86.3 | 200 | ug/Kg |
| 50-32-8 | Benzo(a)pyrene | 79.4 | U | 79.4 | 200 | ug/Kg |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 120 | U | 120 | 200 | ug/Kg |
| 53-70-3 | Dibenzo(a,h)anthracene | 120 | HA Z -165 | 120 | 200 | ug/Kg |



Sample Wt/Vol:

30.04

Units:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

SDG No.: Client Sample ID: SB-01-0-2.0N5336 Matrix: SOIL Lab Sample ID: N5336-01

% Moisture: Analytical Method: SW8270 14.8

g SVOC-TCL BNA -20 Soil Aliquot Vol: uL Test:

Final Vol:

1000

uL

Extraction Type: Level: LOW Decanted: Ν

GPC Factor: 1.0 GPC Cleanup: Ν PH: Injection Volume:

File ID/Qc Batch: Dilution: Prep Batch ID Prep Date Date Analyzed BM037295.D 10/31/22 09:10 10/31/22 18:21 PB148683

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|--------------|----------------------------------|---------|-----------|----------|------------|-------------------|
| 191-24-2 | Benzo(g,h,i)perylene | 110 | U | 110 | 200 | ug/Kg |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 110 | U | 110 | 200 | ug/Kg |
| 123-91-1 | 1,4-Dioxane | 100 | U | 100 | 200 | ug/Kg |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 95.2 | U | 95.2 | 200 | ug/Kg |
| SURROGATES | | | | | | |
| 367-12-4 | 2-Fluorophenol | 109 | | 18 - 112 | 73% | SPK: 150 |
| 13127-88-3 | Phenol-d6 | 97.8 | | 21 - 104 | 65% | SPK: 150 |
| 4165-60-0 | Nitrobenzene-d5 | 62.0 | | 27 - 109 | 62% | SPK: 100 |
| 321-60-8 | 2-Fluorobiphenyl | 65.8 | | 30 - 103 | 66% | SPK: 100 |
| 118-79-6 | 2,4,6-Tribromophenol | 98.7 | | 10 - 121 | 66% | SPK: 150 |
| 1718-51-0 | Terphenyl-d14 | 61.3 | | 21 - 107 | 61% | SPK: 100 |
| INTERNAL STA | ANDARDS | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 273000 | 7.869 | | | |
| 1146-65-2 | Naphthalene-d8 | 1000000 | 10.669 | | | |
| 15067-26-2 | Acenaphthene-d10 | 506000 | 14.504 | | | |
| 1517-22-2 | Phenanthrene-d10 | 936000 | 17.245 | | | |
| 1719-03-5 | Chrysene-d12 | 946000 | 21.421 | | | |
| 1520-96-3 | Perylene-d12 | 1160000 | 23.78 | | | |
| TENTATIVE ID | ENTIFIED COMPOUNDS | | | | | |
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 380 | A | | 4.97 | ug/Kg |
| 000057-10-3 | n-Hexadecanoic acid | 120 | J | | 18.1 | ug/Kg |
| 074685-30-6 | 5-Eicosene, (E)- | 91.4 | J | | 21.1 | ug/Kg |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

HAZ -166_A = Aldol-Condensation Reaction Products



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SB-01-0-2.0 SDG No.: N5336 Lab Sample ID: N5336-01 Matrix: SOIL Analytical Method: SW8260 % Moisture: 14.8 Sample Wt/Vol: 5.06 Units: g Final Vol: 5000 uL VOC-TCLVOA-10 Soil Aliquot Vol: иL Test: ID: 0.25 Level: GC Column: RXI-624 LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011257.D 1 11/02/22 13:11 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight |
|------------|--------------------------------|-------|-----------|------|------------|------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 1.00 | U | 1.00 | 5.80 | ug/Kg |
| 74-87-3 | Chloromethane | 1.20 | U | 1.20 | 5.80 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 1.10 | U | 1.10 | 5.80 | ug/Kg |
| 74-83-9 | Bromomethane | 1.30 | U | 1.30 | 5.80 | ug/Kg |
| 75-00-3 | Chloroethane | 1.00 | U | 1.00 | 5.80 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 1.10 | U | 1.10 | 5.80 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.84 | U | 0.84 | 5.80 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 1.00 | U | 1.00 | 5.80 | ug/Kg |
| 67-64-1 | Acetone | 14.1 | U | 14.1 | 29.0 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.87 | U | 0.87 | 5.80 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 1.10 | U | 1.10 | 5.80 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.50 | U | 1.50 | 5.80 | ug/Kg |
| 75-09-2 | Methylene Chloride | 6.90 | U | 6.90 | 11.6 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.79 | U | 0.79 | 5.80 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.81 | U | 0.81 | 5.80 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.97 | U | 0.97 | 5.80 | ug/Kg |
| 78-93-3 | 2-Butanone | 8.40 | U | 8.40 | 29.0 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.92 | U | 0.92 | 5.80 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.79 | U | 0.79 | 5.80 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.94 | U | 0.94 | 5.80 | ug/Kg |
| 67-66-3 | Chloroform | 0.78 | U | 0.78 | 5.80 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.87 | U | 0.87 | 5.80 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.93 | U | 0.93 | 5.80 | ug/Kg |
| 71-43-2 | Benzene | 0.77 | U | 0.77 | 5.80 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.97 | U | 0.97 | 5.80 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.85 | U | 0.85 | 5.80 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.75 | U | 0.75 | 5.80 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.81 | U | 0.81 | 5.80 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.30 | U | 5.30 | 29.0 | ug/Kg |
| 108-88-3 | Toluene | 0.73 | U | 0.73 | 5.80 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.86 | U | 0.86 | 5.80 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.82 | U | 0.82 | 5.80 | ug/Kg |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SB-01-0-2.0 SDG No.: N5336 Matrix: SOIL Lab Sample ID: N5336-01 Analytical Method: SW8260 % Moisture: 14.8 Sample Wt/Vol: 5.06 Units: g Final Vol: 5000 uL Soil Aliquot Vol: uL Test: VOC-TCLVOA-10 ID: 0.25 Level: GC Column: RXI-624 LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011257.D 1 11/02/22 13:11 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|--------------|-----------------------------|--------|-----------|----------|------------|-------------------|
| 79-00-5 | 1,1,2-Trichloroethane | 1.00 | U | 1.00 | 5.80 | ug/Kg |
| 591-78-6 | 2-Hexanone | 5.40 | U | 5.40 | 29.0 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.87 | U | 0.87 | 5.80 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.87 | U | 0.87 | 5.80 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.88 | U | 0.88 | 5.80 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.75 | U | 0.75 | 5.80 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.81 | U | 0.81 | 5.80 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1.70 | U | 1.70 | 11.6 | ug/Kg |
| 95-47-6 | o-Xylene | 0.92 | U | 0.92 | 5.80 | ug/Kg |
| 100-42-5 | Styrene | 0.92 | U | 0.92 | 5.80 | ug/Kg |
| 75-25-2 | Bromoform | 0.94 | U | 0.94 | 5.80 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.84 | U | 0.84 | 5.80 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.30 | U | 1.30 | 5.80 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.78 | U | 0.78 | 5.80 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.73 | U | 0.73 | 5.80 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.74 | U | 0.74 | 5.80 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.40 | U | 1.40 | 5.80 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1.10 | U | 1.10 | 5.80 | ug/Kg |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.20 | U | 1.20 | 5.80 | ug/Kg |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.6 | | 50 - 163 | 103% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 51.8 | | 54 - 147 | 104% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 47.3 | | 78 - 125 | 95% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.7 | | 50 - 146 | 101% | SPK: 50 |
| INTERNAL STA | | | | | | |
| 363-72-4 | Pentafluorobenzene | 336000 | 7.789 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 576000 | 8.685 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 525000 | 11.49 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 246000 | 13.422 | | | |
| | ENTIFIED COMPOUNDS | _ | | | | _ |
| 001066-40-6 | Silanol, trimethyl- | 8.50 | J | | 6.97 | ug/Kg |
| | unknown10.941 | 6.90 | J | | 10.9 | ug/Kg |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID: SB-01-0-2.0 N5336

Lab Sample ID: N5336-01 SDG No.: Matrix: SOIL

SW8260 Analytical Method:

% Moisture:

Sample Wt/Vol:

5.06 Units: g Final Vol: 5000

uL

Soil Aliquot Vol:

uL

Test:

Date Received:

VOC-TCLVOA-10

GC Column:

RXI-624

ID: 0.25

Level:

LOW

14.8

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

VY011257.D

11/02/22 13:11

VY110222

CAS Number

Parameter

Conc.

Qualifier **MDL**

LOQ / CRQL Units(Dry Weight)

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-01-16.5-17.0 N5336 Lab Sample ID: N5336-02 Matrix: SOIL Level (low/med): % Solid: 92.7 low

| Cas | Parameter | Conc. | Qua | . D | F MDL | LOQ / CRQL | Units(Dry Weight |) Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|-----|-----|--------|------------|------------------|----------------|----------------|----------|
| 7429-90-5 | Aluminum | 3830 | | 1 | 2.13 | 4.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-36-0 | Antimony | 0.58 | JN | 1 | 0.26 | 2.41 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-38-2 | Arsenic | 2.21 | N | 1 | 0.20 | 0.96 | | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-39-3 | Barium | 126 | | 1 | 0.69 | 4.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-41-7 | Beryllium | 0.52 | | 1 | 0.020 | 0.29 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-43-9 | Cadmium | 0.17 | J | 1 | 0.026 | 0.29 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-70-2 | Calcium | 1160 | | 1 | 6.88 | 96.3 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-47-3 | Chromium | 9.33 | | 1 | 0.087 | 0.48 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-48-4 | Cobalt | 8.60 | N | 1 | 0.072 | 1.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-50-8 | Copper | 10.1 | | 1 | 0.41 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7439-89-6 | Iron | 16300 | | 1 | 3.79 | 4.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7439-92-1 | Lead | 7.69 | | 1 | 0.25 | 0.58 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7439-95-4 | Magnesium | 2860 | | 1 | 8.77 | 96.3 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7439-96-5 | Manganese | 466 | | 1 | 0.11 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7439-97-6 | Mercury | 0.027 | | 1 | 0.0030 | 0.013 | mg/Kg | 10/28/22 13:05 | 10/31/22 12:49 | SW7471B |
| 7440-02-0 | Nickel | 15.4 | N | 1 | 0.17 | 1.93 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-09-7 | Potassium | 733 | | 1 | 22.4 | 96.3 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7782-49-2 | Selenium | 0.41 | UN | 1 | 0.41 | 0.96 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-22-4 | Silver | 0.18 | J | 1 | 0.075 | 0.48 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-23-5 | Sodium | 165 | | 1 | 22.5 | 96.3 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-28-0 | Thallium | 0.30 | U | 1 | 0.30 | 1.93 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-62-2 | Vanadium | 15.9 | | 1 | 0.31 | 1.93 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |
| 7440-66-6 | Zinc | 29.0 | N | 1 | 0.21 | 1.93 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:08 | SW6010 |

| Color Before: | Clarity Before: | Texture: |
|---------------|-----------------|------------|
| Color After: | Clarity After: | Artifacts: |

Comments: METALS-TAL

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAZ - $\sqrt[3]{2}$ Spiked sample recovery not within control limits



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336

Lab Sample ID: N5336-02 Matrix: SOIL

Analytical Method: SW8082A % Moisture: 7.3 Decanted: Sample Wt/Vol: 30.04 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: PCB

Extraction Type: Injection Volume:

GPC Factor: 1.0 PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

PO090059.D 1 10/31/22 08:30 11/01/22 10:45 PB148680

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 12674-11-2 | Aroclor-1016 | 3.30 | U | 3.30 | 18.3 | ug/kg |
| 11104-28-2 | Aroclor-1221 | 5.10 | U | 5.10 | 18.3 | ug/kg |
| 11141-16-5 | Aroclor-1232 | 4.20 | U | 4.20 | 18.3 | ug/kg |
| 53469-21-9 | Aroclor-1242 | 2.60 | U | 2.60 | 18.3 | ug/kg |
| 12672-29-6 | Aroclor-1248 | 3.20 | U | 3.20 | 18.3 | ug/kg |
| 11097-69-1 | Aroclor-1254 | 4.50 | U | 4.50 | 18.3 | ug/kg |
| 37324-23-5 | Aroclor-1262 | 3.60 | U | 3.60 | 18.3 | ug/kg |
| 11100-14-4 | Aroclor-1268 | 6.20 | U | 6.20 | 18.3 | ug/kg |
| 11096-82-5 | Aroclor-1260 | 3.50 | U | 3.50 | 18.3 | ug/kg |
| SURROGATES | | | | | | |
| 877-09-8 | Tetrachloro-m-xylene | 24.5 | | 40 - 162 | 122% | SPK: 20 |
| 2051-24-3 | Decachlorobiphenyl | 24.0 | | 32 - 176 | 120% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: Date Received: DDC OEGS - Roadway Improvement in Swaim 10/27/22 Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336 Lab Sample ID: N5336-02 Matrix: SOIL Analytical Method: SW8081 % Moisture: 7.3 Decanted:

Sample Wt/Vol: 30.04 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: Pesticide-TCL

Extraction Type: Injection Volume :

GPC Factor: 1.0 PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 PL078671.D
 1
 10/31/22 08:30
 10/31/22 21:33
 PB148681

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 319-84-6 | alpha-BHC | 0.20 | U | 0.20 | 1.80 | ug/kg |
| 319-85-7 | beta-BHC | 0.37 | U | 0.37 | 1.80 | ug/kg |
| 319-86-8 | delta-BHC | 0.43 | U | 0.43 | 1.80 | ug/kg |
| 58-89-9 | gamma-BHC (Lindane) | 0.16 | U | 0.16 | 1.80 | ug/kg |
| 76-44-8 | Heptachlor | 0.20 | U | 0.20 | 1.80 | ug/kg |
| 309-00-2 | Aldrin | 0.18 | U | 0.18 | 1.80 | ug/kg |
| 1024-57-3 | Heptachlor epoxide | 0.26 | U | 0.26 | 1.80 | ug/kg |
| 959-98-8 | Endosulfan I | 0.15 | U | 0.15 | 1.80 | ug/kg |
| 60-57-1 | Dieldrin | 0.16 | U | 0.16 | 1.80 | ug/kg |
| 72-55-9 | 4,4-DDE | 0.17 | U | 0.17 | 1.80 | ug/kg |
| 72-20-8 | Endrin | 0.18 | U | 0.18 | 1.80 | ug/kg |
| 33213-65-9 | Endosulfan II | 0.33 | U | 0.33 | 1.80 | ug/kg |
| 72-54-8 | 4,4-DDD | 0.20 | U | 0.20 | 1.80 | ug/kg |
| 1031-07-8 | Endosulfan Sulfate | 0.19 | U | 0.19 | 1.80 | ug/kg |
| 50-29-3 | 4,4-DDT | 0.19 | U | 0.19 | 1.80 | ug/kg |
| 72-43-5 | Methoxychlor | 0.22 | U | 0.22 | 1.80 | ug/kg |
| 53494-70-5 | Endrin ketone | 0.26 | U | 0.26 | 1.80 | ug/kg |
| 7421-93-4 | Endrin aldehyde | 0.38 | U | 0.38 | 1.80 | ug/kg |
| 5103-71-9 | alpha-Chlordane | 0.14 | U | 0.14 | 1.80 | ug/kg |
| 5103-74-2 | gamma-Chlordane | 0.15 | U | 0.15 | 1.80 | ug/kg |
| 8001-35-2 | Toxaphene | 6.40 | U | 6.40 | 35.6 | ug/kg |
| SURROGATES | | | | | | |
| 2051-24-3 | Decachlorobiphenyl | 24.4 | | 12 - 143 | 122% | SPK: 20 |
| 877-09-8 | Tetrachloro-m-xylene | 23.4 | | 10 - 159 | 117% | SPK: 20 |



Report of Analysis

Client: LiRo Engineers, Inc.

Date Collected: 10/27/22

Project:

DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID:

SB-01-16.5-17.0

SDG No.:

N5336

Lab Sample ID:

Date Received:

... ... **F**

N5336-02 SW8081 Matrix:

SOIL

Analytical Method: Sample Wt/Vol:

. . .

% Moisture:

10000

7.3

Decanted: uL

Soil Aliquot Vol:

30.04 Units:

g

Final Vol:

.

uL

Test:

Pesticide-TCL

Extraction Type:

File ID/Qc Batch:

Injection Volume:

GPC Factor:

1.0

PH:

Prep Date

Date Analyzed

Prep Batch ID

PL078671.D

Dilution:

10/31/22 08:30

10/31/22 21:33

PB148681

CAS Number

Parameter

Conc.

Qualifier MDL

LOQ / CRQL

Units

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336

Lab Sample ID: N5336-02 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 7.3

Sample Wt/Vol: 30.07 Units: g Final Vol: 1000

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

uL

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037296.D 1 10/31/22 09:10 10/31/22 18:57 PB148683

| BM057290.B | 1 | 10/31/22 | 07.10 | 10/51/22 10.57 | 1 1 10003 | |
|------------|-----------------------------|----------|-----------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| TARGETS | | | | | | |
| 100-52-7 | Benzaldehyde | 150 | U | 150 | 360 | ug/Kg |
| 108-95-2 | Phenol | 72.9 | U | 72.9 | 180 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 86.4 | U | 86.4 | 180 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 73.5 | U | 73.5 | 180 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 120 | U | 120 | 180 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 100 | U | 100 | 180 | ug/Kg |
| 98-86-2 | Acetophenone | 86.2 | U | 86.2 | 180 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 100 | U | 100 | 360 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 81.9 | U | 81.9 | 180 | ug/Kg |
| 67-72-1 | Hexachloroethane | 79.3 | U | 79.3 | 180 | ug/Kg |
| 98-95-3 | Nitrobenzene | 79.5 | U | 79.5 | 180 | ug/Kg |
| 78-59-1 | Isophorone | 71.7 | U | 71.7 | 180 | ug/Kg |
| 88-75-5 | 2-Nitrophenol | 99.9 | U | 99.9 | 180 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 110 | U | 110 | 180 | ug/Kg |
| 111-91-1 | bis(2-Chloroethoxy)methane | 120 | U | 120 | 180 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 87.9 | U | 87.9 | 180 | ug/Kg |
| 91-20-3 | Naphthalene | 79.5 | U | 79.5 | 180 | ug/Kg |
| 106-47-8 | 4-Chloroaniline | 100 | U | 100 | 180 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 110 | U | 110 | 180 | ug/Kg |
| 105-60-2 | Caprolactam | 110 | U | 110 | 360 | ug/Kg |
| 59-50-7 | 4-Chloro-3-methylphenol | 84.7 | U | 84.7 | 180 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 80.7 | U | 80.7 | 180 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 190 | U | 190 | 360 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 91.9 | U | 91.9 | 180 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 90.0 | U | 90.0 | 180 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 93.1 | U | 93.1 | 180 | ug/Kg |
| 91-58-7 | 2-Chloronaphthalene | 92.0 | U | 92.0 | 180 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 120 | U | 120 | 180 | ug/Kg |
| 131-11-3 | Dimethylphthalate | 87.1 | U | 87.1 | 180 | ug/Kg |
| 208-96-8 | Acenaphthylene | 73.9 | U | 73.9 | 180 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 84.1 | HAZ -174 | 84.1 | 180 | ug/Kg |



Sample Wt/Vol:

30.07

Units:

g

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336

Lab Sample ID: N5336-02 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 7.3

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037296.D 1 10/31/22 09:10 10/31/22 18:57 PB148683

| BM037296.D | I | 10/31/22 | 09:10 | 10/31/22 18:57 | PB148683 | · | |
|------------|----------------------------|----------|-----------|----------------|------------|-------------------|--|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) | |
| 99-09-2 | 3-Nitroaniline | 110 | U | 110 | 180 | ug/Kg | |
| 83-32-9 | Acenaphthene | 84.9 | U | 84.9 | 180 | ug/Kg | |
| 51-28-5 | 2,4-Dinitrophenol | 140 | U | 140 | 360 | ug/Kg | |
| 100-02-7 | 4-Nitrophenol | 150 | U | 150 | 360 | ug/Kg | |
| 132-64-9 | Dibenzofuran | 79.9 | U | 79.9 | 180 | ug/Kg | |
| 121-14-2 | 2,4-Dinitrotoluene | 91.0 | U | 91.0 | 180 | ug/Kg | |
| 84-66-2 | Diethylphthalate | 86.6 | U | 86.6 | 180 | ug/Kg | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 100 | U | 100 | 180 | ug/Kg | |
| 86-73-7 | Fluorene | 84.8 | U | 84.8 | 180 | ug/Kg | |
| 100-01-6 | 4-Nitroaniline | 110 | U | 110 | 180 | ug/Kg | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 92.8 | U | 92.8 | 360 | ug/Kg | |
| 86-30-6 | n-Nitrosodiphenylamine | 88.5 | U | 88.5 | 180 | ug/Kg | |
| 101-55-3 | 4-Bromophenyl-phenylether | 110 | U | 110 | 180 | ug/Kg | |
| 118-74-1 | Hexachlorobenzene | 110 | U | 110 | 180 | ug/Kg | |
| 1912-24-9 | Atrazine | 96.9 | U | 96.9 | 180 | ug/Kg | |
| 87-86-5 | Pentachlorophenol | 130 | U | 130 | 360 | ug/Kg | |
| 85-01-8 | Phenanthrene | 90.0 | U | 90.0 | 180 | ug/Kg | |
| 120-12-7 | Anthracene | 90.4 | U | 90.4 | 180 | ug/Kg | |
| 86-74-8 | Carbazole | 90.6 | U | 90.6 | 180 | ug/Kg | |
| 84-74-2 | Di-n-butylphthalate | 93.6 | U | 93.6 | 180 | ug/Kg | |
| 206-44-0 | Fluoranthene | 85.9 | U | 85.9 | 180 | ug/Kg | |
| 129-00-0 | Pyrene | 79.9 | U | 79.9 | 180 | ug/Kg | |
| 85-68-7 | Butylbenzylphthalate | 89.0 | U | 89.0 | 180 | ug/Kg | |
| 91-94-1 | 3,3-Dichlorobenzidine | 150 | U | 150 | 360 | ug/Kg | |
| 56-55-3 | Benzo(a)anthracene | 93.4 | U | 93.4 | 180 | ug/Kg | |
| 218-01-9 | Chrysene | 92.0 | U | 92.0 | 180 | ug/Kg | |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 95.4 | U | 95.4 | 180 | ug/Kg | |
| 117-84-0 | Di-n-octyl phthalate | 97.9 | U | 97.9 | 360 | ug/Kg | |
| 205-99-2 | Benzo(b)fluoranthene | 74.3 | U | 74.3 | 180 | ug/Kg | |
| 207-08-9 | Benzo(k)fluoranthene | 79.2 | U | 79.2 | 180 | ug/Kg | |
| 50-32-8 | Benzo(a)pyrene | 72.9 | U | 72.9 | 180 | ug/Kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 110 | U | 110 | 180 | ug/Kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 110 | HAZ-175 | 110 | 180 | ug/Kg | |
| | | | | | | | |



Sample Wt/Vol:

30.07

Units:

g

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336

Lab Sample ID: N5336-02 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 7.3

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Decanted: N Level: LOW

Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BM037296.D
 1
 10/31/22 09:10
 10/31/22 18:57
 PB148683

CAS Number Parameter Conc. Qualifier **MDL** LOQ / CRQL Units(Dry Weight) 191-24-2 Benzo(g,h,i)perylene 100 U 100 180 ug/Kg 95-94-3 1,2,4,5-Tetrachlorobenzene 98.2 U 98.2 180 ug/Kg 95.9 U 95.9 123-91-1 1.4-Dioxane 180 ug/Kg 58-90-2 2,3,4,6-Tetrachlorophenol 87.4 IJ 87.4 180 ug/Kg **SURROGATES** 367-12-4 2-Fluorophenol 125 18 - 112 83% SPK: 150 13127-88-3 Phenol-d6 114 21 - 104 76% SPK: 150 4165-60-0 Nitrobenzene-d5 70.5 27 - 109 71% SPK: 100 321-60-8 2-Fluorobiphenyl 74.8 30 - 10375% SPK: 100 118-79-6 2,4,6-Tribromophenol 122 81% 10 - 121 SPK: 150 1718-51-0 Terphenyl-d14 76.0 21 - 107 76% SPK: 100 INTERNAL STANDARDS 3855-82-1 1,4-Dichlorobenzene-d4 307000 7.869 1146-65-2 Naphthalene-d8 1160000 10.669 15067-26-2 Acenaphthene-d10 626000 14.504 Phenanthrene-d10 17.245 1517-22-2 1200000 1719-03-5 Chrysene-d12 1190000 21.415 1520-96-3 Perylene-d12 1410000 23.78 TENTATIVE IDENTIFIED COMPOUNDS 000123-42-2 2-Pentanone, 4-hydroxy-4-methyl-380 A 4.97 ug/Kg 000057-10-3 n-Hexadecanoic acid 110 J 18.1 ug/Kg 1000406-04-8 Pentadecafluorooctanoic acid, octa 110 J 21.1 ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of OC limits

D = Dilution

() = Laboratory InHouse Limit

HAZ - 176A = Aldol-Condensation Reaction Products



GC Column:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336 Lab Sample ID: N5336-02 Matrix: SOIL Analytical Method: SW8260 % Moisture: 7.3 Sample Wt/Vol: 5.03 Units: g Final Vol: 5000 uL VOC-TCLVOA-10 Soil Aliquot Vol: иL Test:

Level:

LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011241.D 1 11/02/22 00:00 VY110122

ID: 0.25

RXI-624

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight |
|------------|--------------------------------|--------------------|--------------|------|------------|------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.92 | U | 0.92 | 5.40 | ug/Kg |
| 74-87-3 | Chloromethane | 1.10 | U | 1.10 | 5.40 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 0.98 | U | 0.98 | 5.40 | ug/Kg |
| 74-83-9 | Bromomethane | 1.20 | U | 1.20 | 5.40 | ug/Kg |
| 75-00-3 | Chloroethane | 0.95 | U | 0.95 | 5.40 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 1.00 | U | 1.00 | 5.40 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.77 | U | 0.77 | 5.40 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.92 | U | 0.92 | 5.40 | ug/Kg |
| 67-64-1 | Acetone | 13.1 | U | 13.1 | 26.8 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.80 | U | 0.80 | 5.40 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 1.00 | U | 1.00 | 5.40 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.40 | U | 1.40 | 5.40 | ug/Kg |
| 75-09-2 | Methylene Chloride | 6.40 | U | 6.40 | 10.7 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.73 | U | 0.73 | 5.40 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.75 | U | 0.75 | 5.40 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.90 | U | 0.90 | 5.40 | ug/Kg |
| 78-93-3 | 2-Butanone | 7.80 | U | 7.80 | 26.8 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.85 | U | 0.85 | 5.40 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.73 | U | 0.73 | 5.40 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.87 | U | 0.87 | 5.40 | ug/Kg |
| 67-66-3 | Chloroform | 0.72 | U | 0.72 | 5.40 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.80 | U | 0.80 | 5.40 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.86 | U | 0.86 | 5.40 | ug/Kg |
| 71-43-2 | Benzene | 0.71 | U | 0.71 | 5.40 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.90 | U | 0.90 | 5.40 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.78 | U | 0.78 | 5.40 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.70 | U | 0.70 | 5.40 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.75 | U | 0.75 | 5.40 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 4.90 | U | 4.90 | 26.8 | ug/Kg |
| 108-88-3 | Toluene | 0.68 | U | 0.68 | 5.40 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.79 | U | 0.79 | 5.40 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.76
H <i>A</i> | U
AZ -177 | 0.76 | 5.40 | ug/Kg |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SB-01-16.5-17.0 SDG No.: N5336 Matrix: SOIL Lab Sample ID: N5336-02 Analytical Method: SW8260 % Moisture: 7.3 Sample Wt/Vol: 5.03 Units: g Final Vol: 5000 uL Soil Aliquot Vol: uL Test: VOC-TCLVOA-10

GC Column: RXI-624 ID: 0.25 Level: LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VY011241.D 1 11/02/22 00:00 VY110122

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|--------------|-----------------------------|--------|-----------|----------|------------|-------------------|
| 79-00-5 | 1,1,2-Trichloroethane | 0.92 | U | 0.92 | 5.40 | ug/Kg |
| 591-78-6 | 2-Hexanone | 5.00 | U | 5.00 | 26.8 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.80 | U | 0.80 | 5.40 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.80 | U | 0.80 | 5.40 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.81 | U | 0.81 | 5.40 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.70 | U | 0.70 | 5.40 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.75 | U | 0.75 | 5.40 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1.60 | U | 1.60 | 10.7 | ug/Kg |
| 95-47-6 | o-Xylene | 0.85 | U | 0.85 | 5.40 | ug/Kg |
| 100-42-5 | Styrene | 0.85 | U | 0.85 | 5.40 | ug/Kg |
| 75-25-2 | Bromoform | 0.87 | U | 0.87 | 5.40 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.77 | U | 0.77 | 5.40 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.20 | U | 1.20 | 5.40 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.72 | U | 0.72 | 5.40 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.68 | U | 0.68 | 5.40 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.69 | U | 0.69 | 5.40 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.30 | U | 1.30 | 5.40 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1.00 | U | 1.00 | 5.40 | ug/Kg |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.10 | U | 1.10 | 5.40 | ug/Kg |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 65.6 | | 50 - 163 | 131% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 58.4 | | 54 - 147 | 117% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 49.6 | | 78 - 125 | 99% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.1 | | 50 - 146 | 100% | SPK: 50 |
| INTERNAL STA | | | | | | |
| 363-72-4 | Pentafluorobenzene | 177000 | 7.789 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 329000 | 8.685 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 310000 | 11.49 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 136000 | 13.422 | | | |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

7.3

LOW

Client Sample ID: SB-01-16.5-17.0 N5336

Lab Sample ID: N5336-02 SDG No.: Matrix: SOIL

SW8260 Analytical Method:

% Moisture:

Date Received:

Sample Wt/Vol:

5.03 Units: g Final Vol: 5000

uL

Soil Aliquot Vol:

uL

ID: 0.25

Test:

VOC-TCLVOA-10

GC Column:

Level:

File ID/Qc Batch:

Dilution:

RXI-624

Prep Date

Date Analyzed

Prep Batch ID

VY011241.D

11/02/22 00:00 VY110122

CAS Number

Parameter

Conc.

Qualifier

MDL

LOQ / CRQL

Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-01-16.5-17.0-DUP N5336 Lab Sample ID: N5336-03 Matrix: SOIL Level (low/med): % Solid: 89.6 low

| Cas | Parameter | Conc. | Qua | . D | F MDL | LOQ / CRQL | Units(Dry Weight |) Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|-----|-----|--------|------------|------------------|----------------|----------------|----------|
| 7429-90-5 | Aluminum | 3050 | | 1 | 2.01 | 4.56 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-36-0 | Antimony | 0.58 | JN | 1 | 0.25 | 2.28 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-38-2 | Arsenic | 1.02 | N | 1 | 0.19 | 0.91 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-39-3 | Barium | 84.2 | | 1 | 0.66 | 4.56 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-41-7 | Beryllium | 0.43 | | 1 | 0.019 | 0.27 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-43-9 | Cadmium | 0.12 | J | 1 | 0.025 | 0.27 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-70-2 | Calcium | 791 | | 1 | 6.51 | 91.1 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-47-3 | Chromium | 7.43 | | 1 | 0.082 | 0.46 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-48-4 | Cobalt | 5.19 | N | 1 | 0.068 | 1.37 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-50-8 | Copper | 7.60 | | 1 | 0.38 | 0.91 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7439-89-6 | Iron | 14300 | | 1 | 3.58 | 4.56 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7439-92-1 | Lead | 6.32 | | 1 | 0.24 | 0.55 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7439-95-4 | Magnesium | 1990 | | 1 | 8.30 | 91.1 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7439-96-5 | Manganese | 324 | | 1 | 0.10 | 0.91 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7439-97-6 | Mercury | 0.021 | | 1 | 0.0030 | 0.013 | mg/Kg | 10/28/22 13:05 | 10/31/22 12:52 | SW7471B |
| 7440-02-0 | Nickel | 10.2 | N | 1 | 0.16 | 1.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-09-7 | Potassium | 561 | | 1 | 21.2 | 91.1 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7782-49-2 | Selenium | 0.39 | UN | 1 | 0.39 | 0.91 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-22-4 | Silver | 0.15 | J | 1 | 0.071 | 0.46 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-23-5 | Sodium | 118 | | 1 | 21.3 | 91.1 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-28-0 | Thallium | 0.28 | U | 1 | 0.28 | 1.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-62-2 | Vanadium | 13.4 | | 1 | 0.29 | 1.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |
| 7440-66-6 | Zinc | 22.1 | N | 1 | 0.20 | 1.82 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:23 | SW6010 |

| Color Before: | Clarity Before: | Texture: |
|---------------|-----------------|------------|
| Color After: | Clarity After: | Artifacts: |

Comments: METALS-TAL

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAZ - 180Spiked sample recovery not within control limits



Sample Wt/Vol:

Extraction Type:

284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Final Vol:

Injection Volume:

10000

иL

Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SDG No.: SB-01-16.5-17.0-DUP N5336

Lab Sample ID: N5336-03 Matrix: **SOIL**

% Moisture: Analytical Method: SW8082A 10.4 Decanted: Units:

Test: PCB Soil Aliquot Vol: иL

g

GPC Factor: 1.0 PH:

30.06

Dilution: Prep Batch ID File ID/Qc Batch: Prep Date Date Analyzed

PB148680 PO090060.D 1 10/31/22 08:30 11/01/22 11:02

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 12674-11-2 | Aroclor-1016 | 3.40 | U | 3.40 | 18.9 | ug/kg |
| 11104-28-2 | Aroclor-1221 | 5.20 | U | 5.20 | 18.9 | ug/kg |
| 11141-16-5 | Aroclor-1232 | 4.40 | U | 4.40 | 18.9 | ug/kg |
| 53469-21-9 | Aroclor-1242 | 2.70 | U | 2.70 | 18.9 | ug/kg |
| 12672-29-6 | Aroclor-1248 | 3.30 | U | 3.30 | 18.9 | ug/kg |
| 11097-69-1 | Aroclor-1254 | 4.70 | U | 4.70 | 18.9 | ug/kg |
| 37324-23-5 | Aroclor-1262 | 3.70 | U | 3.70 | 18.9 | ug/kg |
| 11100-14-4 | Aroclor-1268 | 6.40 | U | 6.40 | 18.9 | ug/kg |
| 11096-82-5 | Aroclor-1260 | 3.60 | U | 3.60 | 18.9 | ug/kg |
| SURROGATES | | | | | | |
| 877-09-8 | Tetrachloro-m-xylene | 25.6 | | 40 - 162 | 128% | SPK: 20 |
| 2051-24-3 | Decachlorobiphenyl | 24.0 | | 32 - 176 | 120% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: Date Received: DDC OEGS - Roadway Improvement in Swaim 10/27/22 Client Sample ID: SB-01-16.5-17.0-DUP SDG No.: N5336 Lab Sample ID: N5336-03 Matrix: SOIL Analytical Method: SW8081 % Moisture: 10.4 Decanted: Sample Wt/Vol: 30.06 Final Vol: 10000 uL Units: g Pesticide-TCL Soil Aliquot Vol: uL Test: Extraction Type: Injection Volume: GPC Factor: 1.0 PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

PL078672.D 1 10/31/22 08:30 10/31/22 21:47 PB148681

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 319-84-6 | alpha-BHC | 0.21 | U | 0.21 | 1.90 | ug/kg |
| 319-85-7 | beta-BHC | 0.38 | U | 0.38 | 1.90 | ug/kg |
| 319-86-8 | delta-BHC | 0.45 | U | 0.45 | 1.90 | ug/kg |
| 58-89-9 | gamma-BHC (Lindane) | 0.17 | U | 0.17 | 1.90 | ug/kg |
| 76-44-8 | Heptachlor | 0.21 | U | 0.21 | 1.90 | ug/kg |
| 309-00-2 | Aldrin | 0.19 | U | 0.19 | 1.90 | ug/kg |
| 1024-57-3 | Heptachlor epoxide | 0.27 | U | 0.27 | 1.90 | ug/kg |
| 959-98-8 | Endosulfan I | 0.16 | U | 0.16 | 1.90 | ug/kg |
| 60-57-1 | Dieldrin | 0.17 | U | 0.17 | 1.90 | ug/kg |
| 72-55-9 | 4,4-DDE | 1.10 | J | 0.18 | 1.90 | ug/kg |
| 72-20-8 | Endrin | 0.19 | U | 0.19 | 1.90 | ug/kg |
| 33213-65-9 | Endosulfan II | 0.35 | U | 0.35 | 1.90 | ug/kg |
| 72-54-8 | 4,4-DDD | 0.21 | U | 0.21 | 1.90 | ug/kg |
| 1031-07-8 | Endosulfan Sulfate | 0.20 | U | 0.20 | 1.90 | ug/kg |
| 50-29-3 | 4,4-DDT | 1.30 | JP | 0.20 | 1.90 | ug/kg |
| 72-43-5 | Methoxychlor | 0.22 | U | 0.22 | 1.90 | ug/kg |
| 53494-70-5 | Endrin ketone | 0.27 | U | 0.27 | 1.90 | ug/kg |
| 7421-93-4 | Endrin aldehyde | 0.39 | U | 0.39 | 1.90 | ug/kg |
| 5103-71-9 | alpha-Chlordane | 0.14 | U | 0.14 | 1.90 | ug/kg |
| 5103-74-2 | gamma-Chlordane | 0.16 | U | 0.16 | 1.90 | ug/kg |
| 8001-35-2 | Toxaphene | 6.60 | U | 6.60 | 36.8 | ug/kg |
| SURROGATES | | | | | | |
| 2051-24-3 | Decachlorobiphenyl | 24.2 | | 12 - 143 | 121% | SPK: 20 |
| 877-09-8 | Tetrachloro-m-xylene | 24.3 | | 10 - 159 | 122% | SPK: 20 |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project:

DDC OEGS - Roadway Improvement in Swaim

Date Received: 10/27/22

Client Sample ID:

SB-01-16.5-17.0-DUP

N5336

Lab Sample ID:

N5336-03

SOIL 10.4

Analytical Method:

SW8081

% Moisture:

Matrix:

SDG No.:

Decanted:

Sample Wt/Vol:

30.06 Units: g Final Vol:

10000 иL

Soil Aliquot Vol:

Test:

Pesticide-TCL

Extraction Type:

иL

Injection Volume:

GPC Factor:

1.0

PH:

Prep Date

Date Analyzed

Prep Batch ID

PL078672.D

File ID/Qc Batch:

Dilution:

10/31/22 08:30

10/31/22 21:47

PB148681

CAS Number

Parameter

Conc.

Qualifier MDL

LOQ / CRQL

Units

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Sample Wt/Vol:

30.09

Units:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0-DUP SDG No.: N5336 SOIL Lab Sample ID: N5336-03 Matrix:

Analytical Method: SW8270 % Moisture: 10.4

g Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Level: Decanted: N LOW

GPC Factor: 1.0 GPC Cleanup: Ν PH: Injection Volume:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037299.D 1 10/31/22 09:10 10/31/22 20:45 PB148683

| BM037277.B | 1 | 10/31/22 | 07.10 | 10/31/22 20:13 | 1 1 10003 | |
|------------|-----------------------------|----------|-----------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| TARGETS | | | | | | |
| 100-52-7 | Benzaldehyde | 160 | U | 160 | 370 | ug/Kg |
| 108-95-2 | Phenol | 75.3 | U | 75.3 | 190 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 89.4 | U | 89.4 | 190 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 76.0 | U | 76.0 | 190 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 120 | U | 120 | 190 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 110 | U | 110 | 190 | ug/Kg |
| 98-86-2 | Acetophenone | 89.1 | U | 89.1 | 190 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 110 | U | 110 | 370 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 84.7 | U | 84.7 | 190 | ug/Kg |
| 67-72-1 | Hexachloroethane | 82.0 | U | 82.0 | 190 | ug/Kg |
| 98-95-3 | Nitrobenzene | 82.2 | U | 82.2 | 190 | ug/Kg |
| 78-59-1 | Isophorone | 74.1 | U | 74.1 | 190 | ug/Kg |
| 88-75-5 | 2-Nitrophenol | 100 | U | 100 | 190 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 110 | U | 110 | 190 | ug/Kg |
| 111-91-1 | bis(2-Chloroethoxy)methane | 120 | U | 120 | 190 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 90.9 | U | 90.9 | 190 | ug/Kg |
| 91-20-3 | Naphthalene | 82.2 | U | 82.2 | 190 | ug/Kg |
| 106-47-8 | 4-Chloroaniline | 110 | U | 110 | 190 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 110 | U | 110 | 190 | ug/Kg |
| 105-60-2 | Caprolactam | 110 | U | 110 | 370 | ug/Kg |
| 59-50-7 | 4-Chloro-3-methylphenol | 87.6 | U | 87.6 | 190 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 83.5 | U | 83.5 | 190 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 190 | U | 190 | 370 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 95.0 | U | 95.0 | 190 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 93.0 | U | 93.0 | 190 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 96.3 | U | 96.3 | 190 | ug/Kg |
| 91-58-7 | 2-Chloronaphthalene | 95.1 | U | 95.1 | 190 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 120 | U | 120 | 190 | ug/Kg |
| 131-11-3 | Dimethylphthalate | 90.0 | U | 90.0 | 190 | ug/Kg |
| 208-96-8 | Acenaphthylene | 76.4 | U | 76.4 | 190 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 86.9 | HAZ -184 | 86.9 | 190 | ug/Kg |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0-DUP SDG No.: N5336

Lab Sample ID:N5336-03Matrix:SOILAnalytical Method:SW8270% Moisture:10.4

Sample Wt/Vol: 30.09 Units: g Final Vol: 1000 uL
Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Extraction Type: Decanted: N Level: LOW

Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037299.D 1 10/31/22 09:10 10/31/22 20:45 PB148683

| BM037299.D | 1 | 10/31/22 | 09:10 | 10/31/22 20:45 | PB148683 | |
|------------|----------------------------|----------|-----------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| 99-09-2 | 3-Nitroaniline | 110 | U | 110 | 190 | ug/Kg |
| 83-32-9 | Acenaphthene | 87.8 | U | 87.8 | 190 | ug/Kg |
| 51-28-5 | 2,4-Dinitrophenol | 140 | U | 140 | 370 | ug/Kg |
| 100-02-7 | 4-Nitrophenol | 150 | U | 150 | 370 | ug/Kg |
| 132-64-9 | Dibenzofuran | 82.6 | U | 82.6 | 190 | ug/Kg |
| 121-14-2 | 2,4-Dinitrotoluene | 94.1 | U | 94.1 | 190 | ug/Kg |
| 84-66-2 | Diethylphthalate | 89.6 | U | 89.6 | 190 | ug/Kg |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 100 | U | 100 | 190 | ug/Kg |
| 86-73-7 | Fluorene | 87.7 | U | 87.7 | 190 | ug/Kg |
| 100-01-6 | 4-Nitroaniline | 120 | U | 120 | 190 | ug/Kg |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 95.9 | U | 95.9 | 370 | ug/Kg |
| 86-30-6 | n-Nitrosodiphenylamine | 91.5 | U | 91.5 | 190 | ug/Kg |
| 101-55-3 | 4-Bromophenyl-phenylether | 110 | U | 110 | 190 | ug/Kg |
| 118-74-1 | Hexachlorobenzene | 120 | U | 120 | 190 | ug/Kg |
| 1912-24-9 | Atrazine | 100 | U | 100 | 190 | ug/Kg |
| 87-86-5 | Pentachlorophenol | 130 | U | 130 | 370 | ug/Kg |
| 85-01-8 | Phenanthrene | 93.0 | U | 93.0 | 190 | ug/Kg |
| 120-12-7 | Anthracene | 93.5 | U | 93.5 | 190 | ug/Kg |
| 86-74-8 | Carbazole | 93.7 | U | 93.7 | 190 | ug/Kg |
| 84-74-2 | Di-n-butylphthalate | 96.8 | U | 96.8 | 190 | ug/Kg |
| 206-44-0 | Fluoranthene | 88.8 | U | 88.8 | 190 | ug/Kg |
| 129-00-0 | Pyrene | 82.6 | U | 82.6 | 190 | ug/Kg |
| 85-68-7 | Butylbenzylphthalate | 92.0 | U | 92.0 | 190 | ug/Kg |
| 91-94-1 | 3,3-Dichlorobenzidine | 150 | U | 150 | 370 | ug/Kg |
| 56-55-3 | Benzo(a)anthracene | 96.6 | U | 96.6 | 190 | ug/Kg |
| 218-01-9 | Chrysene | 95.1 | U | 95.1 | 190 | ug/Kg |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 98.6 | U | 98.6 | 190 | ug/Kg |
| 117-84-0 | Di-n-octyl phthalate | 100 | U | 100 | 370 | ug/Kg |
| 205-99-2 | Benzo(b)fluoranthene | 76.8 | U | 76.8 | 190 | ug/Kg |
| 207-08-9 | Benzo(k)fluoranthene | 81.9 | U | 81.9 | 190 | ug/Kg |
| 50-32-8 | Benzo(a)pyrene | 75.3 | U | 75.3 | 190 | ug/Kg |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 110 | U | 110 | 190 | ug/Kg |
| 53-70-3 | Dibenzo(a,h)anthracene | 110 | HAZ-185 | 110 | 190 | ug/Kg |
| | | | | | | |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-16.5-17.0-DUP SDG No.: N5336

Lab Sample ID: N5336-03 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 10.4

Sample Wt/Vol: 30.09 Units: g Final Vol: 1000

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Extraction Type: Decanted: N Level: LOW

Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BM037299.D
 1
 10/31/22 09:10
 10/31/22 20:45
 PB148683

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|---------------|----------------------------------|---------|-----------|----------|------------|-------------------|
| 191-24-2 | Benzo(g,h,i)perylene | 110 | U | 110 | 190 | ug/Kg |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 100 | U | 100 | 190 | ug/Kg |
| 123-91-1 | 1,4-Dioxane | 99.1 | U | 99.1 | 190 | ug/Kg |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 90.4 | U | 90.4 | 190 | ug/Kg |
| SURROGATES | | | | | | |
| 367-12-4 | 2-Fluorophenol | 107 | | 18 - 112 | 71% | SPK: 150 |
| 13127-88-3 | Phenol-d6 | 97.1 | | 21 - 104 | 65% | SPK: 150 |
| 4165-60-0 | Nitrobenzene-d5 | 60.0 | | 27 - 109 | 60% | SPK: 100 |
| 321-60-8 | 2-Fluorobiphenyl | 63.0 | | 30 - 103 | 63% | SPK: 100 |
| 118-79-6 | 2,4,6-Tribromophenol | 100 | | 10 - 121 | 67% | SPK: 150 |
| 1718-51-0 | Terphenyl-d14 | 56.9 | | 21 - 107 | 57% | SPK: 100 |
| INTERNAL STA | NDARDS | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 301000 | 7.869 | | | |
| 1146-65-2 | Naphthalene-d8 | 1140000 | 10.669 | | | |
| 15067-26-2 | Acenaphthene-d10 | 601000 | 14.504 | | | |
| 1517-22-2 | Phenanthrene-d10 | 1160000 | 17.245 | | | |
| 1719-03-5 | Chrysene-d12 | 1300000 | 21.415 | | | |
| 1520-96-3 | Perylene-d12 | 1510000 | 23.774 | | | |
| TENTATIVE IDI | ENTIFIED COMPOUNDS | | | | | |
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 320 | A | | 4.97 | ug/Kg |
| 000057-10-3 | n-Hexadecanoic acid | 95.0 | J | | 18.1 | ug/Kg |
| 006971-40-0 | 17-Pentatriacontene | 120 | J | | 21.1 | ug/Kg |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

uL

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

HAZ -186A = Aldol-Condensation Reaction Products



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: Date Received: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Client Sample ID: SB-01-16.5-17.0-DUP SDG No.: N5336 Lab Sample ID: Matrix: SOIL N5336-03 Analytical Method: SW8260 % Moisture: 10.4 Sample Wt/Vol: 5.09 Units: g Final Vol: 5000 uL VOC-TCLVOA-10 Soil Aliquot Vol: uL Test: ID: 0.25 Level: GC Column: RXI-624 LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011271.D 1 11/02/22 18:28 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight |
|------------|--------------------------------|-------|-----------|------|------------|------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.94 | U | 0.94 | 5.50 | ug/Kg |
| 74-87-3 | Chloromethane | 1.20 | U | 1.20 | 5.50 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 74-83-9 | Bromomethane | 1.30 | U | 1.30 | 5.50 | ug/Kg |
| 75-00-3 | Chloroethane | 0.98 | U | 0.98 | 5.50 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 1.10 | U | 1.10 | 5.50 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.79 | U | 0.79 | 5.50 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.94 | U | 0.94 | 5.50 | ug/Kg |
| 67-64-1 | Acetone | 13.4 | U | 13.4 | 27.4 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.40 | U | 1.40 | 5.50 | ug/Kg |
| 75-09-2 | Methylene Chloride | 6.50 | U | 6.50 | 11.0 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.75 | U | 0.75 | 5.50 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.92 | U | 0.92 | 5.50 | ug/Kg |
| 78-93-3 | 2-Butanone | 8.00 | U | 8.00 | 27.4 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.75 | U | 0.75 | 5.50 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.89 | U | 0.89 | 5.50 | ug/Kg |
| 67-66-3 | Chloroform | 0.73 | U | 0.73 | 5.50 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.88 | U | 0.88 | 5.50 | ug/Kg |
| 71-43-2 | Benzene | 0.72 | U | 0.72 | 5.50 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.92 | U | 0.92 | 5.50 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.80 | U | 0.80 | 5.50 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.71 | U | 0.71 | 5.50 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.00 | U | 5.00 | 27.4 | ug/Kg |
| 108-88-3 | Toluene | 0.69 | U | 0.69 | 5.50 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.81 | U | 0.81 | 5.50 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.78 | U | 0.78 | 5.50 | ug/Kg |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Date Received: Client Sample ID: SB-01-16.5-17.0-DUP SDG No.: N5336 Matrix: SOIL Lab Sample ID: N5336-03 Analytical Method: SW8260 % Moisture: 10.4 Sample Wt/Vol: 5.09 Units: g Final Vol: 5000 uL VOC-TCLVOA-10 Soil Aliquot Vol: uL Test: ID: 0.25 Level: GC Column: RXI-624 LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011271.D 1 11/02/22 18:28 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|--------------|-----------------------------|--------|-----------|----------|------------|-------------------|
| 79-00-5 | 1,1,2-Trichloroethane | 0.94 | U | 0.94 | 5.50 | ug/Kg |
| 591-78-6 | 2-Hexanone | 5.10 | U | 5.10 | 27.4 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.83 | U | 0.83 | 5.50 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.71 | U | 0.71 | 5.50 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1.60 | U | 1.60 | 11.0 | ug/Kg |
| 95-47-6 | o-Xylene | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 100-42-5 | Styrene | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 75-25-2 | Bromoform | 0.89 | U | 0.89 | 5.50 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.79 | U | 0.79 | 5.50 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.20 | U | 1.20 | 5.50 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.73 | U | 0.73 | 5.50 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.69 | U | 0.69 | 5.50 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.70 | U | 0.70 | 5.50 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.40 | U | 1.40 | 5.50 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.10 | U | 1.10 | 5.50 | ug/Kg |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.6 | | 50 - 163 | 103% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 51.1 | | 54 - 147 | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 46.8 | | 78 - 125 | 94% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 46.4 | | 50 - 146 | 93% | SPK: 50 |
| INTERNAL STA | | | | | | |
| 363-72-4 | Pentafluorobenzene | 308000 | 7.789 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 534000 | 8.685 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 479000 | 11.489 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 216000 | 13.422 | | | |
| | ENTIFIED COMPOUNDS | 44.0 | - | | 6.05 | /77 |
| 001066-40-6 | Silanol, trimethyl- | 11.9 | J | | 6.97 | ug/Kg |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID: SB-01-16.5-17.0-DUP N5336

SDG No.:

Lab Sample ID: N5336-03 Matrix:

Date Received:

SOIL

SW8260 Analytical Method:

% Moisture:

10.4

Sample Wt/Vol:

Units: g

Final Vol:

uL

Soil Aliquot Vol:

uL

Test:

VOC-TCLVOA-10

GC Column:

RXI-624

5.09

ID: 0.25

Level:

LOW

5000

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

11/02/22 18:28

Prep Batch ID

VY011271.D

VY110222

CAS Number

Parameter

Conc.

Qualifier

MDL

LOQ / CRQL Units(Dry Weight)

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 09:15

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-COMP SDG No.: N5336

Lab Sample ID: N5336-04 Matrix: SOIL

% Solid: 100

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|------------------|-------|------|----|-------|------------|-------|----------------|----------------|----------|
| Corrosivity | 8.70 | Н | 1 | 0 | 0 | pН | | 10/30/22 07:25 | 9045D |
| Ignitability | NO | | 1 | 0 | 0 | oC | | 10/31/22 11:35 | 1030 |
| Reactive Cyanide | 0.049 | U | 1 | 0.049 | 0.049 | mg/Kg | 10/31/22 13:30 | 10/31/22 15:31 | 9012B |
| Reactive Sulfide | 10.0 | U | 1 | 10.0 | 10.0 | mg/Kg | 10/31/22 15:30 | 11/01/22 09:40 | 9034 |

Comments: pH result reported at temperature 20.1 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAN = Spliked sample recovery not within control limits



Report of Analysis

Client: LiRo Engineers, Inc.

Date Collected: 10/27/22

Project:

DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID:

SB-01-COMP

N5336

Lab Sample ID:

N5336-04

N5336

7.3

Analytical Method:

8015D DRO

Matrix: SOIL

Decanted:

Sample Wt/Vol:

20.04

1

mL

Soil Aliquot Vol:

30.04

g

Final Vol: Test:

% Moisture:

Date Received:

SDG No.:

Diesel Range Organics

Extraction Type:

иL

Units:

Injection Volume:

GPC Factor:

PH:

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

FG011078.D

1

10/31/22 08:41

10/31/22 17:21

PB148682

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|--------------------------|-----------------|-------|-----------|----------|------------|-------------------|
| TARGETS
DRO | DRO | 1270 | J | 236 | 1800 | ug/kg |
| SURROGATES
16416-32-3 | Tetracosane-d50 | 14.5 | | 37 - 130 | 72% | SPK: 20 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-01-COMP SDG No.: N5336

Lab Sample ID: N5336-04 Matrix: SOIL

Analytical Method: 8015D GRO % Moisture: 7.3 Decanted:

Sample Wt/Vol: 5.05 Units: g Final Vol: 5 mL

Soil Aliquot Vol: uL Test: Gasoline Range Organics

Extraction Type: Injection Volume :

GPC Factor: PH:

50

File ID/Qc Batch: Dilution: Date Analyzed Prep Batch ID

CAS Number Parameter Conc. Qualifier MDL LOQ / CRQL Units(Dry Weight)

TARGETS
GRO GRO 193 U 193 2400 ug/kg

10/31/22 19:30

FB103122

SURROGATES

FB028805.D

98-08-8 Alpha, Alpha, Alpha-Trifluoroto 21.0 50 - 150 105% SPK: 20

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-01-COMP N5336 Lab Sample ID: N5336-04 Matrix: **TCLP** Level (low/med): % Solid: low

| Cas | Parameter | Conc. | Qu | a. D | F MDL | I | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|----|------|-------|---|------------|-------|----------------|----------------|----------|
| 7440-38-2 | Arsenic | 30.8 | U | 1 | 30.8 | | 100 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |
| 7440-39-3 | Barium | 2060 | | 1 | 77.9 | | 500 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |
| 7440-43-9 | Cadmium | 2.60 | U | 1 | 2.60 | | 30.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |
| 7440-47-3 | Chromium | 33.7 | J | 1 | 10.4 | | 50.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |
| 7439-92-1 | Lead | 16.4 | U | 1 | 16.4 | | 60.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |
| 7439-97-6 | Mercury | 0.70 | U | 1 | 0.70 | | 2.00 | ug/L | 10/31/22 14:10 | 11/01/22 11:50 | SW7470A |
| 7782-49-2 | Selenium | 35.3 | U | 1 | 35.3 | | 100 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |
| 7440-22-4 | Silver | 8.20 | U | 1 | 8.20 | | 50.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:08 | SW6010 |

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments: TCLP METALS

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence

of interference. OR = Over Range

HAZ -193 Spiked sample recovery not within control limits



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-02-0-2.0N5336 Lab Sample ID: N5336-05 Matrix: SOIL Level (low/med): % Solid: 90.9 low

| Cas | Parameter | Conc. | Qua | ı. D | F MDL | LOQ / CRQL | Units(Dry Weight | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|-----|------|--------|------------|------------------|----------------|----------------|----------|
| 7429-90-5 | Aluminum | 3510 | | 1 | 2.22 | 5.02 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-36-0 | Antimony | 0.69 | JN | 1 | 0.27 | 2.51 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-38-2 | Arsenic | 2.70 | N | 1 | 0.21 | 1.00 | | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-39-3 | Barium | 85.1 | | 1 | 0.72 | 5.02 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-41-7 | Beryllium | 0.67 | | 1 | 0.021 | 0.30 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-43-9 | Cadmium | 0.28 | J | 1 | 0.027 | 0.30 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-70-2 | Calcium | 1010 | | 1 | 7.17 | 100 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-47-3 | Chromium | 10.9 | | 1 | 0.090 | 0.50 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-48-4 | Cobalt | 10.6 | N | 1 | 0.075 | 1.51 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-50-8 | Copper | 10.4 | | 1 | 0.42 | 1.00 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7439-89-6 | Iron | 18200 | | 1 | 3.95 | 5.02 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7439-92-1 | Lead | 10.2 | | 1 | 0.26 | 0.60 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7439-95-4 | Magnesium | 2220 | | 1 | 9.15 | 100 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7439-96-5 | Manganese | 681 | | 1 | 0.11 | 1.00 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7439-97-6 | Mercury | 0.028 | | 1 | 0.0030 | 0.013 | mg/Kg | 10/28/22 13:05 | 10/31/22 12:54 | SW7471B |
| 7440-02-0 | Nickel | 22.5 | N | 1 | 0.18 | 2.01 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-09-7 | Potassium | 669 | | 1 | 23.4 | 100 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7782-49-2 | Selenium | 0.52 | JN | 1 | 0.43 | 1.00 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-22-4 | Silver | 0.18 | J | 1 | 0.078 | 0.50 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-23-5 | Sodium | 150 | | 1 | 23.5 | 100 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-28-0 | Thallium | 0.31 | U | 1 | 0.31 | 2.01 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-62-2 | Vanadium | 17.7 | | 1 | 0.32 | 2.01 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |
| 7440-66-6 | Zinc | 35.2 | N | 1 | 0.22 | 2.01 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:46 | SW6010 |

| Color Before: | Clarity Before: | Texture: |
|---------------|-----------------|------------|
| Color After: | Clarity After: | Artifacts: |

Comments: METALS-TAL

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAZ - 194 Spiked sample recovery not within control limits



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-0-2.0 SDG No.: N5336

Lab Sample ID: N5336-05 Matrix: SOIL

Analytical Method: SW8082A % Moisture: 9.1 Decanted:

Sample Wt/Vol: 30.1 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: PCB

Extraction Type: Injection Volume:

GPC Factor: 1.0 PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

PO090061.D 1 10/31/22 08:30 11/01/22 11:19 PB148680

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 12674-11-2 | Aroclor-1016 | 3.30 | U | 3.30 | 18.6 | ug/kg |
| 11104-28-2 | Aroclor-1221 | 5.20 | U | 5.20 | 18.6 | ug/kg |
| 11141-16-5 | Aroclor-1232 | 4.30 | U | 4.30 | 18.6 | ug/kg |
| 53469-21-9 | Aroclor-1242 | 2.70 | U | 2.70 | 18.6 | ug/kg |
| 12672-29-6 | Aroclor-1248 | 3.30 | U | 3.30 | 18.6 | ug/kg |
| 11097-69-1 | Aroclor-1254 | 4.60 | U | 4.60 | 18.6 | ug/kg |
| 37324-23-5 | Aroclor-1262 | 3.70 | U | 3.70 | 18.6 | ug/kg |
| 11100-14-4 | Aroclor-1268 | 6.30 | U | 6.30 | 18.6 | ug/kg |
| 11096-82-5 | Aroclor-1260 | 3.60 | U | 3.60 | 18.6 | ug/kg |
| SURROGATES | | | | | | |
| 877-09-8 | Tetrachloro-m-xylene | 24.5 | | 40 - 162 | 123% | SPK: 20 |
| 2051-24-3 | Decachlorobiphenyl | 22.6 | | 32 - 176 | 113% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Decanted:



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: Date Received: DDC OEGS - Roadway Improvement in Swaim 10/27/22 Client Sample ID: SB-02-0-2.0 SDG No.: N5336 Lab Sample ID: N5336-05 Matrix: SOIL Analytical Method: SW8081 % Moisture: 9.1

Sample Wt/Vol: 30.1 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: Pesticide-TCL

Extraction Type: Injection Volume :

GPC Factor: 1.0 PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 PL078673.D
 1
 10/31/22 08:30
 10/31/22 22:00
 PB148681

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 319-84-6 | alpha-BHC | 0.21 | U | 0.21 | 1.90 | ug/kg |
| 319-85-7 | beta-BHC | 0.37 | U | 0.37 | 1.90 | ug/kg |
| 319-86-8 | delta-BHC | 0.44 | U | 0.44 | 1.90 | ug/kg |
| 58-89-9 | gamma-BHC (Lindane) | 0.16 | U | 0.16 | 1.90 | ug/kg |
| 76-44-8 | Heptachlor | 0.21 | U | 0.21 | 1.90 | ug/kg |
| 309-00-2 | Aldrin | 0.19 | U | 0.19 | 1.90 | ug/kg |
| 1024-57-3 | Heptachlor epoxide | 0.26 | U | 0.26 | 1.90 | ug/kg |
| 959-98-8 | Endosulfan I | 0.15 | U | 0.15 | 1.90 | ug/kg |
| 60-57-1 | Dieldrin | 0.16 | U | 0.16 | 1.90 | ug/kg |
| 72-55-9 | 4,4-DDE | 0.18 | U | 0.18 | 1.90 | ug/kg |
| 72-20-8 | Endrin | 0.19 | U | 0.19 | 1.90 | ug/kg |
| 33213-65-9 | Endosulfan II | 0.34 | U | 0.34 | 1.90 | ug/kg |
| 72-54-8 | 4,4-DDD | 0.21 | U | 0.21 | 1.90 | ug/kg |
| 1031-07-8 | Endosulfan Sulfate | 0.20 | U | 0.20 | 1.90 | ug/kg |
| 50-29-3 | 4,4-DDT | 0.20 | U | 0.20 | 1.90 | ug/kg |
| 72-43-5 | Methoxychlor | 0.22 | U | 0.22 | 1.90 | ug/kg |
| 53494-70-5 | Endrin ketone | 0.26 | U | 0.26 | 1.90 | ug/kg |
| 7421-93-4 | Endrin aldehyde | 0.38 | U | 0.38 | 1.90 | ug/kg |
| 5103-71-9 | alpha-Chlordane | 0.14 | U | 0.14 | 1.90 | ug/kg |
| 5103-74-2 | gamma-Chlordane | 0.15 | U | 0.15 | 1.90 | ug/kg |
| 8001-35-2 | Toxaphene | 6.50 | U | 6.50 | 36.2 | ug/kg |
| SURROGATES | | | | | | |
| 2051-24-3 | Decachlorobiphenyl | 22.8 | | 12 - 143 | 114% | SPK: 20 |
| 877-09-8 | Tetrachloro-m-xylene | 23.8 | | 10 - 159 | 119% | SPK: 20 |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project:

DDC OEGS - Roadway Improvement in Swaim

Date Received: 10/27/22

Client Sample ID:

SB-02-0-2.0

N5336

9.1

Lab Sample ID:

N5336-05

Analytical Method:

SOIL

SW8081

Matrix: % Moisture:

SDG No.:

Decanted:

Sample Wt/Vol:

30.1 Units: Final Vol:

10000 иL

Soil Aliquot Vol:

Test:

Extraction Type:

g иL

Pesticide-TCL

GPC Factor:

1.0

PH:

Injection Volume:

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

PL078673.D

10/31/22 08:30

10/31/22 22:00

PB148681

CAS Number

Parameter

Conc.

Qualifier MDL

LOQ / CRQL

Units

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-0-2.0 SDG No.: N5336

Lab Sample ID: N5336-05 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 9.1

Sample Wt/Vol: 30.03 Units: g Final Vol: 1000

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

uL

Extraction Type: Decanted: N Level: LOW

Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037293.D 1 10/31/22 09:10 10/31/22 17:09 PB148683

| BM037275.B | 1 | 10/31/22 05.10 | | 10/31/22 17:09 | 15110005 | |
|------------|-----------------------------|----------------|-----------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| TARGETS | | | | | | |
| 100-52-7 | Benzaldehyde | 150 | U | 150 | 360 | ug/Kg |
| 108-95-2 | Phenol | 74.4 | U | 74.4 | 190 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 88.3 | U | 88.3 | 190 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 75.1 | U | 75.1 | 190 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 120 | U | 120 | 190 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 110 | U | 110 | 190 | ug/Kg |
| 98-86-2 | Acetophenone | 88.0 | U | 88.0 | 190 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 110 | U | 110 | 360 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 83.6 | U | 83.6 | 190 | ug/Kg |
| 67-72-1 | Hexachloroethane | 81.0 | U | 81.0 | 190 | ug/Kg |
| 98-95-3 | Nitrobenzene | 81.2 | U | 81.2 | 190 | ug/Kg |
| 78-59-1 | Isophorone | 73.2 | U | 73.2 | 190 | ug/Kg |
| 88-75-5 | 2-Nitrophenol | 100 | U | 100 | 190 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 110 | U | 110 | 190 | ug/Kg |
| 111-91-1 | bis(2-Chloroethoxy)methane | 120 | U | 120 | 190 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 89.8 | U | 89.8 | 190 | ug/Kg |
| 91-20-3 | Naphthalene | 81.2 | U | 81.2 | 190 | ug/Kg |
| 106-47-8 | 4-Chloroaniline | 110 | U | 110 | 190 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 110 | U | 110 | 190 | ug/Kg |
| 105-60-2 | Caprolactam | 110 | U | 110 | 360 | ug/Kg |
| 59-50-7 | 4-Chloro-3-methylphenol | 86.5 | U | 86.5 | 190 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 82.4 | U | 82.4 | 190 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 190 | U | 190 | 360 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 93.9 | U | 93.9 | 190 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 91.9 | U | 91.9 | 190 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 95.1 | U | 95.1 | 190 | ug/Kg |
| 91-58-7 | 2-Chloronaphthalene | 94.0 | U | 94.0 | 190 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 120 | U | 120 | 190 | ug/Kg |
| 131-11-3 | Dimethylphthalate | 88.9 | U | 88.9 | 190 | ug/Kg |
| 208-96-8 | Acenaphthylene | 75.5 | U | 75.5 | 190 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 85.8 | HAZ -198 | 85.8 | 190 | ug/Kg |



Sample Wt/Vol:

30.03

Units:

g

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-0-2.0 SDG No.: N5336
Lab Sample ID: N5336-05 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 9.1

Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037293.D 1 10/31/22 09:10 10/31/22 17:09 PB148683

| BM03/293.D 1 | | 10/31/22 | 09:10 | 10/31/22 17:09 | PB148683 | | |
|--------------|----------------------------|----------|-----------|----------------|------------|-------------------|--|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) | |
| 99-09-2 | 3-Nitroaniline | 110 | U | 110 | 190 | ug/Kg | |
| 83-32-9 | Acenaphthene | 86.7 | U | 86.7 | 190 | ug/Kg | |
| 51-28-5 | 2,4-Dinitrophenol | 140 | U | 140 | 360 | ug/Kg | |
| 100-02-7 | 4-Nitrophenol | 150 | U | 150 | 360 | ug/Kg | |
| 132-64-9 | Dibenzofuran | 81.5 | U | 81.5 | 190 | ug/Kg | |
| 121-14-2 | 2,4-Dinitrotoluene | 93.0 | U | 93.0 | 190 | ug/Kg | |
| 84-66-2 | Diethylphthalate | 88.5 | U | 88.5 | 190 | ug/Kg | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 100 | U | 100 | 190 | ug/Kg | |
| 86-73-7 | Fluorene | 86.6 | U | 86.6 | 190 | ug/Kg | |
| 100-01-6 | 4-Nitroaniline | 110 | U | 110 | 190 | ug/Kg | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 94.7 | U | 94.7 | 360 | ug/Kg | |
| 86-30-6 | n-Nitrosodiphenylamine | 90.3 | U | 90.3 | 190 | ug/Kg | |
| 101-55-3 | 4-Bromophenyl-phenylether | 110 | U | 110 | 190 | ug/Kg | |
| 118-74-1 | Hexachlorobenzene | 110 | U | 110 | 190 | ug/Kg | |
| 1912-24-9 | Atrazine | 98.9 | U | 98.9 | 190 | ug/Kg | |
| 87-86-5 | Pentachlorophenol | 130 | U | 130 | 360 | ug/Kg | |
| 85-01-8 | Phenanthrene | 91.9 | U | 91.9 | 190 | ug/Kg | |
| 120-12-7 | Anthracene | 92.3 | U | 92.3 | 190 | ug/Kg | |
| 86-74-8 | Carbazole | 92.5 | U | 92.5 | 190 | ug/Kg | |
| 84-74-2 | Di-n-butylphthalate | 95.6 | U | 95.6 | 190 | ug/Kg | |
| 206-44-0 | Fluoranthene | 87.7 | U | 87.7 | 190 | ug/Kg | |
| 129-00-0 | Pyrene | 81.5 | U | 81.5 | 190 | ug/Kg | |
| 85-68-7 | Butylbenzylphthalate | 90.9 | U | 90.9 | 190 | ug/Kg | |
| 91-94-1 | 3,3-Dichlorobenzidine | 150 | U | 150 | 360 | ug/Kg | |
| 56-55-3 | Benzo(a)anthracene | 95.4 | U | 95.4 | 190 | ug/Kg | |
| 218-01-9 | Chrysene | 94.0 | U | 94.0 | 190 | ug/Kg | |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 97.4 | U | 97.4 | 190 | ug/Kg | |
| 117-84-0 | Di-n-octyl phthalate | 100 | U | 100 | 360 | ug/Kg | |
| 205-99-2 | Benzo(b)fluoranthene | 75.8 | U | 75.8 | 190 | ug/Kg | |
| 207-08-9 | Benzo(k)fluoranthene | 80.9 | U | 80.9 | 190 | ug/Kg | |
| 50-32-8 | Benzo(a)pyrene | 74.4 | U | 74.4 | 190 | ug/Kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 110 | U | 110 | 190 | ug/Kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 110 | HAZ-199 | 110 | 190 | ug/Kg | |
| | | | | | | | |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-0-2.0 SDG No.: N5336

Lab Sample ID: N5336-05 Matrix: SOIL

Analytical Method: SW8270 % Moisture: 9.1

Sample Wt/Vol: 30.03 Units: g Final Vol: 1000 uL
Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Extraction Type: Decanted: N Level: LOW

Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BM037293.D 1 10/31/22 09:10 10/31/22 17:09 PB148683

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|--------------|----------------------------------|---------|-----------|----------|------------|-------------------|
| 191-24-2 | Benzo(g,h,i)perylene | 110 | U | 110 | 190 | ug/Kg |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 100 | U | 100 | 190 | ug/Kg |
| 123-91-1 | 1,4-Dioxane | 97.9 | U | 97.9 | 190 | ug/Kg |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 89.2 | U | 89.2 | 190 | ug/Kg |
| SURROGATES | | | | | | |
| 367-12-4 | 2-Fluorophenol | 101 | | 18 - 112 | 67% | SPK: 150 |
| 13127-88-3 | Phenol-d6 | 91.9 | | 21 - 104 | 61% | SPK: 150 |
| 4165-60-0 | Nitrobenzene-d5 | 56.1 | | 27 - 109 | 56% | SPK: 100 |
| 321-60-8 | 2-Fluorobiphenyl | 58.6 | | 30 - 103 | 59% | SPK: 100 |
| 118-79-6 | 2,4,6-Tribromophenol | 103 | | 10 - 121 | 69% | SPK: 150 |
| 1718-51-0 | Terphenyl-d14 | 56.1 | | 21 - 107 | 56% | SPK: 100 |
| INTERNAL STA | NDARDS | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 298000 | 7.869 | | | |
| 1146-65-2 | Naphthalene-d8 | 1130000 | 10.669 | | | |
| 15067-26-2 | Acenaphthene-d10 | 610000 | 14.504 | | | |
| 1517-22-2 | Phenanthrene-d10 | 1170000 | 17.245 | | | |
| 1719-03-5 | Chrysene-d12 | 1200000 | 21.415 | | | |
| 1520-96-3 | Perylene-d12 | 1430000 | 23.78 | | | |
| TENTATIVE ID | ENTIFIED COMPOUNDS | | | | | |
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 300 | A | | 4.97 | ug/Kg |
| 000057-10-3 | n-Hexadecanoic acid | 120 | J | | 18.1 | ug/Kg |
| 000295-48-7 | Cyclopentadecane | 100 | J | | 21.1 | ug/Kg |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

HAZ -200A = Aldol-Condensation Reaction Products



GC Column:

RXI-624

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Date Received: Client Sample ID: SB-02-0-2.0 SDG No.: N5336 Lab Sample ID: N5336-05 Matrix: SOIL Analytical Method: SW8260 % Moisture: 9.1 Sample Wt/Vol: 5.02 Units: g Final Vol: 5000 uL Soil Aliquot Vol: uL Test: VOC-TCLVOA-10 ID: 0.25 Level:

LOW

File ID/Qc Batch: Dilution: Prep Batch ID Prep Date Date Analyzed VY011243.D 1 11/02/22 00:46 VY110122

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight |
|------------|--------------------------------|-------|-----------|------|------------|------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.94 | U | 0.94 | 5.50 | ug/Kg |
| 74-87-3 | Chloromethane | 1.20 | U | 1.20 | 5.50 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 74-83-9 | Bromomethane | 1.30 | U | 1.30 | 5.50 | ug/Kg |
| 75-00-3 | Chloroethane | 0.98 | U | 0.98 | 5.50 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 1.10 | U | 1.10 | 5.50 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.79 | U | 0.79 | 5.50 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.94 | U | 0.94 | 5.50 | ug/Kg |
| 67-64-1 | Acetone | 15.4 | J | 13.4 | 27.4 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.40 | U | 1.40 | 5.50 | ug/Kg |
| 75-09-2 | Methylene Chloride | 6.50 | U | 6.50 | 11.0 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.75 | U | 0.75 | 5.50 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.92 | U | 0.92 | 5.50 | ug/Kg |
| 78-93-3 | 2-Butanone | 8.00 | U | 8.00 | 27.4 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.75 | U | 0.75 | 5.50 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.89 | U | 0.89 | 5.50 | ug/Kg |
| 67-66-3 | Chloroform | 0.73 | U | 0.73 | 5.50 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.88 | U | 0.88 | 5.50 | ug/Kg |
| 71-43-2 | Benzene | 0.72 | U | 0.72 | 5.50 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.92 | U | 0.92 | 5.50 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.80 | U | 0.80 | 5.50 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.71 | U | 0.71 | 5.50 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.00 | U | 5.00 | 27.4 | ug/Kg |
| 108-88-3 | Toluene | 0.69 | U | 0.69 | 5.50 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.81 | U | 0.81 | 5.50 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.78 | U | 0.78 | 5.50 | ug/Kg |
| | • • | | 7 201 | | | |



GC Column:

3855-82-1

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 SDG No.: Client Sample ID: SB-02-0-2.0 N5336 N5336-05 Matrix: SOIL Lab Sample ID: Analytical Method: SW8260 % Moisture: 9.1 Sample Wt/Vol: 5.02 Units: Final Vol: 5000 uL g VOC-TCLVOA-10 Soil Aliquot Vol: uL Test:

Level:

LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011243.D 1 11/02/22 00:46 VY110122

ID: 0.25

RXI-624

1,4-Dichlorobenzene-d4

CAS Number Conc. **MDL** LOQ / CRQL Parameter Qualifier Units(Dry Weight) 79-00-5 1,1,2-Trichloroethane 0.94 IJ 0.94 5.50 ug/Kg 5.10 IJ 5.10 27.4 591-78-6 2-Hexanone ug/Kg 124-48-1 Dibromochloromethane 0.82 IJ 0.82 5.50 ug/Kg U 106-93-4 1,2-Dibromoethane 0.82 0.82 5.50 ug/Kg 127-18-4 Tetrachloroethene 0.83 U 0.83 5.50 ug/Kg 108-90-7 Chlorobenzene 0.71 U 0.71 5.50 ug/Kg Ethvl Benzene 0.77 IJ 0.77 100-41-4 5.50 ug/Kg m/p-Xylenes U 179601-23-1 1.60 1.60 11.0 ug/Kg 0.87 U 95-47-6 o-Xvlene 0.87 5.50 ug/Kg U 100-42-5 Styrene 0.87 0.87 5.50 ug/Kg 75-25-2 0.89 U Bromoform 0.89 5.50 ug/Kg U 98-82-8 Isopropylbenzene 0.79 0.79 5.50 ug/Kg U 79-34-5 1,1,2,2-Tetrachloroethane 1.20 1.20 5.50 ug/Kg 541-73-1 1,3-Dichlorobenzene 0.73 U 0.73 5.50 ug/Kg 0.69 U 106-46-7 1,4-Dichlorobenzene 0.69 5.50 ug/Kg 95-50-1 1,2-Dichlorobenzene 0.70 U 0.70 5.50 ug/Kg 96-12-8 1,2-Dibromo-3-Chloropropane 1.40 U 1.40 5.50 ug/Kg U 120-82-1 1.2.4-Trichlorobenzene 1.00 1.00 5.50 ug/Kg 1,2,3-Trichlorobenzene U 87-61-6 1.10 1.10 5.50 ug/Kg SURROGATES 17060-07-0 1.2-Dichloroethane-d4 74.1 50 - 163 148% SPK: 50 Dibromofluoromethane 66.4 54 - 147 133% SPK: 50 1868-53-7 Toluene-d8 48.1 78 - 125 96% 2037-26-5 SPK: 50 4-Bromofluorobenzene 50 - 146 98% 460-00-4 49.2 SPK: 50 INTERNAL STANDARDS 363-72-4 Pentafluorobenzene 39100 7.789 8.685 540-36-3 1,4-Difluorobenzene 68800 Chlorobenzene-d5 11.49 3114-55-4 69600

13.422

29100



Report of Analysis

Client: LiRo Engineers, Inc.

Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

SOIL

9.1

5000

Client Sample ID: SB-02-0-2.0

SDG No.: N5336

Lab Sample ID: N5336-05 Matrix:

SW8260 Analytical Method:

% Moisture:

Date Received:

uL

Sample Wt/Vol:

5.02 Units: g Final Vol:

Soil Aliquot Vol:

uL

Test:

VOC-TCLVOA-10

GC Column:

RXI-624

ID: 0.25

Level:

LOW

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

11/02/22 00:46

Prep Batch ID

VY011243.D

VY110122

CAS Number

Parameter

Conc.

Qualifier

MDL

LOQ / CRQL

Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Date Received: Client Sample ID: SB-02-0-2.0RE SDG No.: N5336 Lab Sample ID: Matrix: SOIL N5336-05RE Analytical Method: SW8260 % Moisture: 9.1 Sample Wt/Vol: 4.99 Units: g Final Vol: 5000 uL VOC-TCLVOA-10 Soil Aliquot Vol: uL Test:

GC Column: RXI-624 ID: 0.25 Level: LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID VY011272.D 1 11/02/22 18:50 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight |
|------------|--------------------------------|-------|-----------|------|------------|------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.95 | U | 0.95 | 5.50 | ug/Kg |
| 74-87-3 | Chloromethane | 1.20 | U | 1.20 | 5.50 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 74-83-9 | Bromomethane | 1.30 | U | 1.30 | 5.50 | ug/Kg |
| 75-00-3 | Chloroethane | 0.98 | U | 0.98 | 5.50 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 1.10 | U | 1.10 | 5.50 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.79 | U | 0.79 | 5.50 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.95 | U | 0.95 | 5.50 | ug/Kg |
| 67-64-1 | Acetone | 23.5 | J | 13.4 | 27.6 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.83 | U | 0.83 | 5.50 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.40 | U | 1.40 | 5.50 | ug/Kg |
| 75-09-2 | Methylene Chloride | 7.70 | J | 6.60 | 11.0 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.75 | U | 0.75 | 5.50 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.93 | U | 0.93 | 5.50 | ug/Kg |
| 78-93-3 | 2-Butanone | 8.00 | U | 8.00 | 27.6 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.75 | U | 0.75 | 5.50 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.89 | U | 0.89 | 5.50 | ug/Kg |
| 67-66-3 | Chloroform | 0.74 | U | 0.74 | 5.50 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.83 | U | 0.83 | 5.50 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.88 | U | 0.88 | 5.50 | ug/Kg |
| 71-43-2 | Benzene | 0.73 | U | 0.73 | 5.50 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.93 | U | 0.93 | 5.50 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.80 | U | 0.80 | 5.50 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.72 | U | 0.72 | 5.50 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.00 | U | 5.00 | 27.6 | ug/Kg |
| 108-88-3 | Toluene | 0.69 | U | 0.69 | 5.50 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.82 | U | 0.82 | 5.50 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.78 | U | 0.78 | 5.50 | ug/Kg |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Date Received: Client Sample ID: SB-02-0-2.0RE SDG No.: N5336 Lab Sample ID: Matrix: SOIL N5336-05RE

Analytical Method: SW8260 % Moisture: 9.1
Sample Wt/Vol: 4.99 Units: g Final Vol: 5000

Soil Aliquot Vol: uL Test: VOC-TCLVOA-10

uL

GC Column: RXI-624 ID: 0.25 Level: LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011272.D 1 11/02/22 18:50 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|----------------|-----------------------------|-------|-----------|----------|------------|-------------------|
| 79-00-5 | 1,1,2-Trichloroethane | 0.95 | U | 0.95 | 5.50 | ug/Kg |
| 591-78-6 | 2-Hexanone | 5.20 | U | 5.20 | 27.6 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.83 | U | 0.83 | 5.50 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.83 | U | 0.83 | 5.50 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.84 | U | 0.84 | 5.50 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.72 | U | 0.72 | 5.50 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.77 | U | 0.77 | 5.50 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1.60 | U | 1.60 | 11.0 | ug/Kg |
| 95-47-6 | o-Xylene | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 100-42-5 | Styrene | 0.87 | U | 0.87 | 5.50 | ug/Kg |
| 75-25-2 | Bromoform | 0.89 | U | 0.89 | 5.50 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.79 | U | 0.79 | 5.50 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.20 | U | 1.20 | 5.50 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.74 | U | 0.74 | 5.50 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.69 | U | 0.69 | 5.50 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.71 | U | 0.71 | 5.50 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.40 | U | 1.40 | 5.50 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1.00 | U | 1.00 | 5.50 | ug/Kg |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.10 | U | 1.10 | 5.50 | ug/Kg |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 67.3 | | 50 - 163 | 135% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 59.7 | | 54 - 147 | 119% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 46.9 | | 78 - 125 | 94% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 44.4 | | 50 - 146 | 89% | SPK: 50 |
| INTERNAL STANI | | | | | | |
| 363-72-4 | Pentafluorobenzene | 17300 | 7.789 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 28100 | 8.685 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 26700 | 11.49 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 10500 | 13.422 | | | |



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID: SB-02-0-2.0RE N5336

Lab Sample ID: N5336-05RE SDG No.: Matrix: SOIL

Analytical Method: SW8260 % Moisture:

Date Received:

Sample Wt/Vol:

4.99 Units: g

Final Vol:

5000 uL

Soil Aliquot Vol:

uL

Test:

VOC-TCLVOA-10

GC Column:

RXI-624

ID: 0.25

Level:

LOW

9.1

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

11/02/22 18:50

Prep Batch ID

VY011272.D

VY110222

CAS Number

Parameter

Conc.

Qualifier

MDL

LOQ / CRQL

Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-02-16.5-17.0 N5336 Lab Sample ID: N5336-06 Matrix: SOIL Level (low/med): % Solid: 98 low

| Cas | Parameter | Conc. | Qua | ı. D | F MDL | LOQ / CRQL | Units(Dry Weight |) Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|-----|------|--------|------------|------------------|----------------|----------------|----------|
| 7429-90-5 | Aluminum | 3600 | | 1 | 1.96 | 4.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-36-0 | Antimony | 0.61 | JN | 1 | 0.24 | 2.22 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-38-2 | Arsenic | 1.55 | N | 1 | 0.19 | 0.89 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-39-3 | Barium | 78.0 | | 1 | 0.64 | 4.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-41-7 | Beryllium | 0.53 | | 1 | 0.019 | 0.27 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-43-9 | Cadmium | 0.17 | J | 1 | 0.024 | 0.27 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-70-2 | Calcium | 2860 | | 1 | 6.34 | 88.7 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-47-3 | Chromium | 13.6 | | 1 | 0.080 | 0.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-48-4 | Cobalt | 6.86 | N | 1 | 0.067 | 1.33 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-50-8 | Copper | 11.4 | | 1 | 0.37 | 0.89 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7439-89-6 | Iron | 17500 | | 1 | 3.49 | 4.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7439-92-1 | Lead | 8.61 | | 1 | 0.23 | 0.53 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7439-95-4 | Magnesium | 2130 | | 1 | 8.08 | 88.7 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7439-96-5 | Manganese | 284 | | 1 | 0.098 | 0.89 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7439-97-6 | Mercury | 0.023 | | 1 | 0.0030 | 0.013 | mg/Kg | 10/28/22 13:05 | 10/31/22 13:03 | SW7471B |
| 7440-02-0 | Nickel | 13.3 | N | 1 | 0.16 | 1.77 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-09-7 | Potassium | 669 | | 1 | 20.7 | 88.7 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7782-49-2 | Selenium | 0.80 | JN | 1 | 0.38 | 0.89 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-22-4 | Silver | 0.17 | J | 1 | 0.069 | 0.44 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-23-5 | Sodium | 142 | | 1 | 20.8 | 88.7 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-28-0 | Thallium | 0.28 | U | 1 | 0.28 | 1.77 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-62-2 | Vanadium | 16.6 | | 1 | 0.28 | 1.77 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |
| 7440-66-6 | Zinc | 27.4 | N | 1 | 0.20 | 1.77 | mg/Kg | 10/29/22 09:02 | 11/01/22 18:50 | SW6010 |

| Color Before: | Clarity Before: | Texture: |
|---------------|-----------------|------------|
| Color After: | Clarity After: | Artifacts: |

Comments: METALS-TAL

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAZ - $\Re \mathbb{Z}$ Spiked sample recovery not within control limits



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-16.5-17.0 SDG No.: N5336

Lab Sample ID: N5336-06 Matrix: SOIL

Analytical Method: SW8082A % Moisture: 2 Decanted: Sample Wt/Vol: 30.05 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: PCB

Extraction Type: Injection Volume :

GPC Factor: 1.0 PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

PO090062.D 1 10/31/22 08:30 11/01/22 11:36 PB148680

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 12674-11-2 | Aroclor-1016 | 3.10 | U | 3.10 | 17.3 | ug/kg |
| 11104-28-2 | Aroclor-1221 | 4.80 | U | 4.80 | 17.3 | ug/kg |
| 11141-16-5 | Aroclor-1232 | 4.00 | U | 4.00 | 17.3 | ug/kg |
| 53469-21-9 | Aroclor-1242 | 2.50 | U | 2.50 | 17.3 | ug/kg |
| 12672-29-6 | Aroclor-1248 | 3.00 | U | 3.00 | 17.3 | ug/kg |
| 11097-69-1 | Aroclor-1254 | 4.30 | U | 4.30 | 17.3 | ug/kg |
| 37324-23-5 | Aroclor-1262 | 3.40 | U | 3.40 | 17.3 | ug/kg |
| 11100-14-4 | Aroclor-1268 | 5.80 | U | 5.80 | 17.3 | ug/kg |
| 11096-82-5 | Aroclor-1260 | 3.30 | U | 3.30 | 17.3 | ug/kg |
| SURROGATES | | | | | | |
| 877-09-8 | Tetrachloro-m-xylene | 25.3 | | 40 - 162 | 127% | SPK: 20 |
| 2051-24-3 | Decachlorobiphenyl | 24.4 | | 32 - 176 | 122% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Date Received: Project: DDC OEGS - Roadway Improvement in Swaim 10/27/22 Client Sample ID: SB-02-16.5-17.0 SDG No.: N5336 Lab Sample ID: N5336-06 Matrix: SOIL Analytical Method: SW8081 % Moisture: 2

Analytical Method: SW8081 % Moisture: 2 Decanted: Sample Wt/Vol: 30.05 Units: g Final Vol: 10000 uL

Soil Aliquot Vol: uL Test: Pesticide-TCL

Extraction Type: Injection Volume :

GPC Factor: 1.0 PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 PL078674.D
 1
 10/31/22 08:30
 10/31/22 22:14
 PB148681

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|----------------------|-------|-----------|----------|------------|-------------------|
| TARGETS | | | | | | |
| 319-84-6 | alpha-BHC | 0.19 | U | 0.19 | 1.70 | ug/kg |
| 319-85-7 | beta-BHC | 0.35 | U | 0.35 | 1.70 | ug/kg |
| 319-86-8 | delta-BHC | 0.41 | U | 0.41 | 1.70 | ug/kg |
| 58-89-9 | gamma-BHC (Lindane) | 0.15 | U | 0.15 | 1.70 | ug/kg |
| 76-44-8 | Heptachlor | 0.19 | U | 0.19 | 1.70 | ug/kg |
| 309-00-2 | Aldrin | 0.17 | U | 0.17 | 1.70 | ug/kg |
| 1024-57-3 | Heptachlor epoxide | 0.24 | U | 0.24 | 1.70 | ug/kg |
| 959-98-8 | Endosulfan I | 0.14 | U | 0.14 | 1.70 | ug/kg |
| 60-57-1 | Dieldrin | 0.15 | U | 0.15 | 1.70 | ug/kg |
| 72-55-9 | 4,4-DDE | 0.16 | U | 0.16 | 1.70 | ug/kg |
| 72-20-8 | Endrin | 0.17 | U | 0.17 | 1.70 | ug/kg |
| 33213-65-9 | Endosulfan II | 0.32 | U | 0.32 | 1.70 | ug/kg |
| 72-54-8 | 4,4-DDD | 0.19 | U | 0.19 | 1.70 | ug/kg |
| 1031-07-8 | Endosulfan Sulfate | 0.18 | U | 0.18 | 1.70 | ug/kg |
| 50-29-3 | 4,4-DDT | 0.18 | U | 0.18 | 1.70 | ug/kg |
| 72-43-5 | Methoxychlor | 0.20 | U | 0.20 | 1.70 | ug/kg |
| 53494-70-5 | Endrin ketone | 0.24 | U | 0.24 | 1.70 | ug/kg |
| 7421-93-4 | Endrin aldehyde | 0.36 | U | 0.36 | 1.70 | ug/kg |
| 5103-71-9 | alpha-Chlordane | 0.13 | U | 0.13 | 1.70 | ug/kg |
| 5103-74-2 | gamma-Chlordane | 0.14 | U | 0.14 | 1.70 | ug/kg |
| 8001-35-2 | Toxaphene | 6.00 | U | 6.00 | 33.6 | ug/kg |
| SURROGATES | | | | | | |
| 2051-24-3 | Decachlorobiphenyl | 24.4 | | 12 - 143 | 122% | SPK: 20 |
| 877-09-8 | Tetrachloro-m-xylene | 23.9 | | 10 - 159 | 119% | SPK: 20 |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project:

DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID:

SB-02-16.5-17.0

N5336

Lab Sample ID:

N5336-06

Analytical Method:

SOIL

SW8081

Units:

Matrix: % Moisture:

SDG No.:

Date Received:

Decanted:

Sample Wt/Vol:

30.05

Final Vol:

10000 иL

Soil Aliquot Vol:

g

Test:

Pesticide-TCL

Extraction Type:

иL

GPC Factor:

1.0

PH:

Injection Volume:

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

PL078674.D

10/31/22 08:30

10/31/22 22:14

PB148681

CAS Number

Parameter

Conc.

Qualifier MDL

LOQ / CRQL

Units

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



30.08

Units:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-16.5-17.0 SDG No.: N5336 SOIL Lab Sample ID: N5336-06 Matrix:

Analytical Method: SW8270 % Moisture: 2

Sample Wt/Vol: g Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Level: Decanted: N LOW

GPC Factor: 1.0 GPC Cleanup: Ν PH: Injection Volume:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BF130899.D 1 10/31/22 09:10 11/01/22 14:16 PB148683

| BI 130077.B | 1 | 10/31/22 05.10 | | 11/01/22 11:10 | 15110005 | |
|-------------|-----------------------------|----------------|-----------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| TARGETS | | | | | | |
| 100-52-7 | Benzaldehyde | 140 | U | 140 | 340 | ug/Kg |
| 108-95-2 | Phenol | 68.9 | U | 68.9 | 170 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 81.7 | U | 81.7 | 170 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 69.5 | U | 69.5 | 170 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 110 | U | 110 | 170 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 97.6 | U | 97.6 | 170 | ug/Kg |
| 98-86-2 | Acetophenone | 81.5 | U | 81.5 | 170 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 99.1 | U | 99.1 | 340 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 77.4 | U | 77.4 | 170 | ug/Kg |
| 67-72-1 | Hexachloroethane | 75.0 | U | 75.0 | 170 | ug/Kg |
| 98-95-3 | Nitrobenzene | 75.2 | U | 75.2 | 170 | ug/Kg |
| 78-59-1 | Isophorone | 67.8 | U | 67.8 | 170 | ug/Kg |
| 88-75-5 | 2-Nitrophenol | 94.4 | U | 94.4 | 170 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 100 | U | 100 | 170 | ug/Kg |
| 111-91-1 | bis(2-Chloroethoxy)methane | 110 | U | 110 | 170 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 83.1 | U | 83.1 | 170 | ug/Kg |
| 91-20-3 | Naphthalene | 75.2 | U | 75.2 | 170 | ug/Kg |
| 106-47-8 | 4-Chloroaniline | 98.0 | U | 98.0 | 170 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 100 | U | 100 | 170 | ug/Kg |
| 105-60-2 | Caprolactam | 100 | U | 100 | 340 | ug/Kg |
| 59-50-7 | 4-Chloro-3-methylphenol | 80.1 | U | 80.1 | 170 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 76.3 | U | 76.3 | 170 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 180 | U | 180 | 340 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 86.9 | U | 86.9 | 170 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 85.1 | U | 85.1 | 170 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 88.0 | U | 88.0 | 170 | ug/Kg |
| 91-58-7 | 2-Chloronaphthalene | 87.0 | U | 87.0 | 170 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 110 | U | 110 | 170 | ug/Kg |
| 131-11-3 | Dimethylphthalate | 82.3 | U | 82.3 | 170 | ug/Kg |
| 208-96-8 | Acenaphthylene | 69.9 | U | 69.9 | 170 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 79.5 | HAZ -211 | 79.5 | 170 | ug/Kg |



Sample Wt/Vol:

30.08

Units:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SB-02-16.5-17.0 SDG No.: N5336 SOIL Lab Sample ID: N5336-06 Matrix:

Analytical Method: SW8270 % Moisture: 2

g Soil Aliquot Vol: uL Test: SVOC-TCL BNA -20

Final Vol:

1000

uL

Extraction Type: Level: Decanted: N LOW

GPC Factor: 1.0 GPC Cleanup: Ν PH: Injection Volume:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BF130899.D 1 10/31/22 09:10 11/01/22 14:16 PB148683

| BF130899.D 1 | | 10/31/22 | 09:10 | 11/01/22 14:16 | PB148683 | |
|--------------|----------------------------|----------|-----------|----------------|------------|-------------------|
| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
| 99-09-2 | 3-Nitroaniline | 100 | U | 100 | 170 | ug/Kg |
| 83-32-9 | Acenaphthene | 80.3 | U | 80.3 | 170 | ug/Kg |
| 51-28-5 | 2,4-Dinitrophenol | 130 | U | 130 | 340 | ug/Kg |
| 100-02-7 | 4-Nitrophenol | 140 | U | 140 | 340 | ug/Kg |
| 132-64-9 | Dibenzofuran | 75.5 | U | 75.5 | 170 | ug/Kg |
| 121-14-2 | 2,4-Dinitrotoluene | 86.1 | U | 86.1 | 170 | ug/Kg |
| 84-66-2 | Diethylphthalate | 81.9 | U | 81.9 | 170 | ug/Kg |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 95.3 | U | 95.3 | 170 | ug/Kg |
| 86-73-7 | Fluorene | 80.2 | U | 80.2 | 170 | ug/Kg |
| 100-01-6 | 4-Nitroaniline | 110 | U | 110 | 170 | ug/Kg |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 87.7 | U | 87.7 | 340 | ug/Kg |
| 86-30-6 | n-Nitrosodiphenylamine | 83.7 | U | 83.7 | 170 | ug/Kg |
| 101-55-3 | 4-Bromophenyl-phenylether | 100 | U | 100 | 170 | ug/Kg |
| 118-74-1 | Hexachlorobenzene | 110 | U | 110 | 170 | ug/Kg |
| 1912-24-9 | Atrazine | 91.6 | U | 91.6 | 170 | ug/Kg |
| 87-86-5 | Pentachlorophenol | 120 | U | 120 | 340 | ug/Kg |
| 85-01-8 | Phenanthrene | 85.1 | U | 85.1 | 170 | ug/Kg |
| 120-12-7 | Anthracene | 85.5 | U | 85.5 | 170 | ug/Kg |
| 86-74-8 | Carbazole | 85.7 | U | 85.7 | 170 | ug/Kg |
| 84-74-2 | Di-n-butylphthalate | 88.5 | U | 88.5 | 170 | ug/Kg |
| 206-44-0 | Fluoranthene | 81.2 | U | 81.2 | 170 | ug/Kg |
| 129-00-0 | Pyrene | 75.5 | U | 75.5 | 170 | ug/Kg |
| 85-68-7 | Butylbenzylphthalate | 84.2 | U | 84.2 | 170 | ug/Kg |
| 91-94-1 | 3,3-Dichlorobenzidine | 140 | U | 140 | 340 | ug/Kg |
| 56-55-3 | Benzo(a)anthracene | 88.3 | U | 88.3 | 170 | ug/Kg |
| 218-01-9 | Chrysene | 87.0 | U | 87.0 | 170 | ug/Kg |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 90.2 | U | 90.2 | 170 | ug/Kg |
| 117-84-0 | Di-n-octyl phthalate | 92.6 | U | 92.6 | 340 | ug/Kg |
| 205-99-2 | Benzo(b)fluoranthene | 70.2 | U | 70.2 | 170 | ug/Kg |
| 207-08-9 | Benzo(k)fluoranthene | 74.9 | U | 74.9 | 170 | ug/Kg |
| 50-32-8 | Benzo(a)pyrene | 68.9 | U | 68.9 | 170 | ug/Kg |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 100 | U | 100 | 170 | ug/Kg |
| 53-70-3 | Dibenzo(a,h)anthracene | 100 | HAZ-212 | 100 | 170 | ug/Kg |
| | | | | | | |



30.08

Units:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SDG No.: SB-02-16.5-17.0 N5336 Lab Sample ID: Matrix: SOIL N5336-06

% Moisture: Analytical Method: SW8270 2

Sample Wt/Vol: g SVOC-TCL BNA -20 Soil Aliquot Vol: uL Test:

Final Vol:

1000

uL

Extraction Type: Decanted: Level: LOW Ν

GPC Factor: 1.0 GPC Cleanup: Ν PH: Injection Volume:

File ID/Qc Batch: Dilution: Prep Batch ID Prep Date Date Analyzed BF130899.D 10/31/22 09:10 11/01/22 14:16 PB148683

| Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|-----------------------------------|---|--|---|--|-----------------------------|
| Benzo(g,h,i)perylene | 98.6 | U | 98.6 | 170 | ug/Kg |
| 1,2,4,5-Tetrachlorobenzene | 92.8 | U | 92.8 | 170 | ug/Kg |
| 1,4-Dioxane | 90.7 | U | 90.7 | 170 | ug/Kg |
| 2,3,4,6-Tetrachlorophenol | 82.6 | U | 82.6 | 170 | ug/Kg |
| | | | | | |
| 2-Fluorophenol | 110 | | 18 - 112 | 73% | SPK: 150 |
| Phenol-d6 | 112 | | 21 - 104 | 75% | SPK: 150 |
| Nitrobenzene-d5 | 86.8 | | 27 - 109 | 87% | SPK: 100 |
| 2-Fluorobiphenyl | 66.6 | | 30 - 103 | 67% | SPK: 100 |
| 2,4,6-Tribromophenol | 125 | | 10 - 121 | 84% | SPK: 150 |
| Terphenyl-d14 | 87.0 | | 21 - 107 | 87% | SPK: 100 |
| NDARDS | | | | | |
| 1,4-Dichlorobenzene-d4 | 84600 | 6.934 | | | |
| Naphthalene-d8 | 338000 | 8.216 | | | |
| Acenaphthene-d10 | 205000 | 9.98 | | | |
| Phenanthrene-d10 | 366000 | 11.474 | | | |
| Chrysene-d12 | 184000 | 14.121 | | | |
| Perylene-d12 | 152000 | 15.633 | | | |
| NTIFIED COMPOUNDS | | | | | |
| Butane, 2-methoxy-2-methyl- | 970 | J | | 2.27 | ug/Kg |
| 2-Pentanone, 4-hydroxy-4-methyl- | 430 | A | | 5.17 | ug/Kg |
| Ethanol, 2-(2-butoxyethoxy)- | 83.5 | J | | 8.12 | ug/Kg |
| Bromoacetic acid, hexadecyl ester | 220 | J | | 14.0 | ug/Kg |
| Triphenylphosphine oxide | 81.4 | J | | 14.2 | ug/Kg |
| | Benzo(g,h,i)perylene 1,2,4,5-Tetrachlorobenzene 1,4-Dioxane 2,3,4,6-Tetrachlorophenol 2-Fluorophenol Phenol-d6 Nitrobenzene-d5 2-Fluorobiphenyl 2,4,6-Tribromophenol Terphenyl-d14 NDARDS 1,4-Dichlorobenzene-d4 Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12 NTIFIED COMPOUNDS Butane, 2-methoxy-2-methyl- 2-Pentanone, 4-hydroxy-4-methyl- Ethanol, 2-(2-butoxyethoxy)- Bromoacetic acid, hexadecyl ester | Benzo(g,h,i)perylene 98.6 1,2,4,5-Tetrachlorobenzene 92.8 1,4-Dioxane 90.7 2,3,4,6-Tetrachlorophenol 82.6 2-Fluorophenol 110 Phenol-d6 112 Nitrobenzene-d5 86.8 2-Fluorobiphenyl 66.6 2,4,6-Tribromophenol 125 Terphenyl-d14 87.0 NDARDS 1,4-Dichlorobenzene-d4 84600 Naphthalene-d8 338000 Acenaphthene-d10 205000 Phenanthrene-d10 366000 Chrysene-d12 184000 Perylene-d12 152000 NTIFIED COMPOUNDS Butane, 2-methoxy-2-methyl- 970 2-Pentanone, 4-hydroxy-4-methyl- 430 Ethanol, 2-(2-butoxyethoxy)- 83.5 | Benzo(g,h,i)perylene 98.6 U 1,2,4,5-Tetrachlorobenzene 92.8 U 1,4-Dioxane 90.7 U 2,3,4,6-Tetrachlorophenol 82.6 U 2-Fluorophenol 110 Phenol-d6 112 Nitrobenzene-d5 86.8 2-Fluorobiphenyl 66.6 2,4,6-Tribromophenol 125 Terphenyl-d14 87.0 NDARDS 1,4-Dichlorobenzene-d4 84600 6.934 Naphthalene-d8 338000 8.216 Acenaphthene-d10 205000 9.98 Phenanthrene-d10 366000 11.474 Chrysene-d12 184000 14.121 Perylene-d12 152000 15.633 INTIFIED COMPOUNDS Sutane, 2-methoxy-2-methyl- 970 J 2-Pentanone, 4-hydroxy-4-methyl- 430 A Ethanol, 2-(2-butoxyethoxy)- 83.5 J Bromoacetic acid, hexadecyl ester 220 J | Benzo(g,h,i)perylene 98.6 U 98.6 1,2,4,5-Tetrachlorobenzene 92.8 U 92.8 1,4-Dioxane 90.7 U 90.7 2,3,4,6-Tetrachlorophenol 82.6 U 82.6 2-Fluorophenol 110 18 - 112 Phenol-d6 112 21 - 104 Nitrobenzene-d5 86.8 27 - 109 2-Fluorobiphenyl 66.6 30 - 103 2,4,6-Tribromophenol 125 10 - 121 Terphenyl-d14 87.0 21 - 107 NDARDS 1,4-Dichlorobenzene-d4 84600 6.934 Naphthalene-d8 338000 8.216 Acenaphthene-d10 205000 9.98 Phenanthrene-d10 366000 11.474 Chrysene-d12 184000 14.121 Perylene-d12 152000 15.633 INTIFIED COMPOUNDS Butane, 2-methoxy-2-methyl- 970 J 2-Pentanone, 4-hydroxy-4-methyl- 430 A Ethanol, 2-(2-butoxyethoxy)- 83.5 J Bromoacetic acid, hexadecyl ester 220 J | Benzo(g,h,i)perylene 98.6 |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit $HAZ -213_A = Aldol-Condensation Reaction Products$



Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SB-02-16.5-17.0 SDG No.: N5336 SOIL Lab Sample ID: N5336-06 Matrix: Analytical Method: SW8260 % Moisture: 2 Sample Wt/Vol: 5.1 Units: g Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOC-TCLVOA-10

GC Column: RXI-624 ID: 0.25 Level: LOW

File ID/Qc Batch: Dilution: Prep Batch ID Prep Date Date Analyzed VY011244.D 1 11/02/22 01:08 VY110122

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight |
|------------|--------------------------------|-------|-----------|------|------------|------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.86 | U | 0.86 | 5.00 | ug/Kg |
| 74-87-3 | Chloromethane | 1.10 | U | 1.10 | 5.00 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 0.91 | U | 0.91 | 5.00 | ug/Kg |
| 74-83-9 | Bromomethane | 1.20 | U | 1.20 | 5.00 | ug/Kg |
| 75-00-3 | Chloroethane | 0.89 | U | 0.89 | 5.00 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 0.97 | U | 0.97 | 5.00 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.72 | U | 0.72 | 5.00 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.86 | U | 0.86 | 5.00 | ug/Kg |
| 67-64-1 | Acetone | 26.6 | | 12.2 | 25.0 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.75 | U | 0.75 | 5.00 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 0.93 | U | 0.93 | 5.00 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.30 | U | 1.30 | 5.00 | ug/Kg |
| 75-09-2 | Methylene Chloride | 6.00 | U | 6.00 | 10.0 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.68 | U | 0.68 | 5.00 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.70 | U | 0.70 | 5.00 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.84 | U | 0.84 | 5.00 | ug/Kg |
| 78-93-3 | 2-Butanone | 7.30 | U | 7.30 | 25.0 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.79 | U | 0.79 | 5.00 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.68 | U | 0.68 | 5.00 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.81 | U | 0.81 | 5.00 | ug/Kg |
| 67-66-3 | Chloroform | 0.67 | U | 0.67 | 5.00 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.75 | U | 0.75 | 5.00 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.80 | U | 0.80 | 5.00 | ug/Kg |
| 71-43-2 | Benzene | 0.66 | U | 0.66 | 5.00 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.84 | U | 0.84 | 5.00 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.73 | U | 0.73 | 5.00 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.65 | U | 0.65 | 5.00 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.70 | U | 0.70 | 5.00 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 4.60 | U | 4.60 | 25.0 | ug/Kg |
| 108-88-3 | Toluene | 0.63 | U | 0.63 | 5.00 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.74 | U | 0.74 | 5.00 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.71 | U | 0.71 | 5.00 | ug/Kg |
| | | HA | AZ -214 | | | |



Soil Aliquot Vol:

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SB-02-16.5-17.0 SDG No.: N5336 Matrix: SOIL Lab Sample ID: N5336-06 Analytical Method: SW8260 % Moisture: 2 Sample Wt/Vol: 5.1 Units: g Final Vol: 5000 uL

Test:

VOC-TCLVOA-10

GC Column: RXI-624 ID: 0.25 Level: LOW

uL

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID VY011244.D 1 11/02/22 01:08 VY110122

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weigh |
|---------------|-----------------------------|-------|-----------|----------|------------|-----------------|
| 79-00-5 | 1,1,2-Trichloroethane | 0.86 | U | 0.86 | 5.00 | ug/Kg |
| 591-78-6 | 2-Hexanone | 4.70 | U | 4.70 | 25.0 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.75 | U | 0.75 | 5.00 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.75 | U | 0.75 | 5.00 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.76 | U | 0.76 | 5.00 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.65 | U | 0.65 | 5.00 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.70 | U | 0.70 | 5.00 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1.50 | U | 1.50 | 10.0 | ug/Kg |
| 95-47-6 | o-Xylene | 0.79 | U | 0.79 | 5.00 | ug/Kg |
| 100-42-5 | Styrene | 0.79 | U | 0.79 | 5.00 | ug/Kg |
| 75-25-2 | Bromoform | 0.81 | U | 0.81 | 5.00 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.72 | U | 0.72 | 5.00 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.10 | U | 1.10 | 5.00 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.67 | U | 0.67 | 5.00 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.63 | U | 0.63 | 5.00 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.64 | U | 0.64 | 5.00 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.20 | U | 1.20 | 5.00 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.94 | U | 0.94 | 5.00 | ug/Kg |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.00 | U | 1.00 | 5.00 | ug/Kg |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 58.5 | | 50 - 163 | 117% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 56.6 | | 54 - 147 | 113% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 49.4 | | 78 - 125 | 99% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 40.3 | | 50 - 146 | 81% | SPK: 50 |
| INTERNAL STAN | | | | | | |
| 363-72-4 | Pentafluorobenzene | 20700 | 7.783 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 32000 | 8.685 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 28300 | 11.489 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 10500 | 13.422 | | | |
| | | | | | | |



Report of Analysis

Client: LiRo Engineers, Inc.

Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID: SB-02-16.5-17.0

215227

2

SDG No.: N5336

Lab Sample ID: N5336-06

Matrix:

Date Received:

SOIL

Analytical Method: SW8260

% Moisture:

Sample Wt/Vol: 5.1

Final Vol:

5000 uL

Soil Aliquot Vol:

g uL

ID: 0.25

Units:

Test: VOC-TCLVOA-10

GC Column: RXI-624

Level:

LOW

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

VY011244.D

11/02/22 01:08

VY110122

CAS Number

Parameter

Conc.

Qualifier MDL

LOQ / CRQL

Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Analytical Method:

SW8260

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Project: Date Received: 10/27/22 Client Sample ID: SB-02-16.5-17.0RE SDG No.: N5336 Lab Sample ID: Matrix: SOIL N5336-06RE

Sample Wt/Vol: 5 Units: g Final Vol: 5000 uL

% Moisture:

2

VOC-TCLVOA-10 Soil Aliquot Vol: uL Test:

ID: 0.25 Level: GC Column: RXI-624 LOW

File ID/Qc Batch: Dilution: Prep Batch ID Prep Date Date Analyzed VY011273.D 1 11/02/22 19:13 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------|--------------------------------|-------|-----------|------|------------|-------------------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.88 | U | 0.88 | 5.10 | ug/Kg |
| 74-87-3 | Chloromethane | 1.10 | U | 1.10 | 5.10 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 0.93 | U | 0.93 | 5.10 | ug/Kg |
| 74-83-9 | Bromomethane | 1.20 | U | 1.20 | 5.10 | ug/Kg |
| 75-00-3 | Chloroethane | 0.91 | U | 0.91 | 5.10 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 0.99 | U | 0.99 | 5.10 | ug/Kg |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.73 | U | 0.73 | 5.10 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.88 | U | 0.88 | 5.10 | ug/Kg |
| 67-64-1 | Acetone | 12.9 | J | 12.4 | 25.5 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.77 | U | 0.77 | 5.10 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 0.95 | U | 0.95 | 5.10 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1.30 | U | 1.30 | 5.10 | ug/Kg |
| 75-09-2 | Methylene Chloride | 6.10 | U | 6.10 | 10.2 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.69 | U | 0.69 | 5.10 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.71 | U | 0.71 | 5.10 | ug/Kg |
| 110-82-7 | Cyclohexane | 0.86 | U | 0.86 | 5.10 | ug/Kg |
| 78-93-3 | 2-Butanone | 7.40 | U | 7.40 | 25.5 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.81 | U | 0.81 | 5.10 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.69 | U | 0.69 | 5.10 | ug/Kg |
| 74-97-5 | Bromochloromethane | 0.83 | U | 0.83 | 5.10 | ug/Kg |
| 67-66-3 | Chloroform | 0.68 | U | 0.68 | 5.10 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.77 | U | 0.77 | 5.10 | ug/Kg |
| 108-87-2 | Methylcyclohexane | 0.82 | U | 0.82 | 5.10 | ug/Kg |
| 71-43-2 | Benzene | 0.67 | U | 0.67 | 5.10 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.86 | U | 0.86 | 5.10 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.74 | U | 0.74 | 5.10 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.66 | U | 0.66 | 5.10 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.71 | U | 0.71 | 5.10 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 4.70 | U | 4.70 | 25.5 | ug/Kg |
| 108-88-3 | Toluene | 0.64 | U | 0.64 | 5.10 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.76 | U | 0.76 | 5.10 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.72 | U | 0.72 | 5.10 | ug/Kg |
| | | HA | AZ -217 | | | |



Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SDC No. 10. 17 ORE

Client Sample ID: SB-02-16.5-17.0RE SDG No.: N5336

Lab Sample ID: N5336-06RE Matrix: SOIL

Analytical Method: SW8260 % Moisture: 2

Sample Wt/Vol: 5 Units: g Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOC-TCLVOA-10

GC Column: RXI-624 ID: 0.25 Level: LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VY011273.D 1 11/02/22 19:13 VY110222

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|---------------|-----------------------------|-------|-----------|----------|------------|-------------------|
| 79-00-5 | 1,1,2-Trichloroethane | 0.88 | U | 0.88 | 5.10 | ug/Kg |
| 591-78-6 | 2-Hexanone | 4.80 | U | 4.80 | 25.5 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.77 | U | 0.77 | 5.10 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.77 | U | 0.77 | 5.10 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.78 | U | 0.78 | 5.10 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.66 | U | 0.66 | 5.10 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.71 | U | 0.71 | 5.10 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1.50 | U | 1.50 | 10.2 | ug/Kg |
| 95-47-6 | o-Xylene | 0.81 | U | 0.81 | 5.10 | ug/Kg |
| 100-42-5 | Styrene | 0.81 | U | 0.81 | 5.10 | ug/Kg |
| 75-25-2 | Bromoform | 0.83 | U | 0.83 | 5.10 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.73 | U | 0.73 | 5.10 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.20 | U | 1.20 | 5.10 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.68 | U | 0.68 | 5.10 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.64 | U | 0.64 | 5.10 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.65 | U | 0.65 | 5.10 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.30 | U | 1.30 | 5.10 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.96 | U | 0.96 | 5.10 | ug/Kg |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.00 | U | 1.00 | 5.10 | ug/Kg |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 42.2 | | 50 - 163 | 84% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 53.6 | | 54 - 147 | 107% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 46.8 | | 78 - 125 | 94% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 36.4 | | 50 - 146 | 73% | SPK: 50 |
| INTERNAL STAN | | | | | | |
| 363-72-4 | Pentafluorobenzene | 53300 | 7.789 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 76900 | 8.685 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 63200 | 11.49 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 23700 | 13.422 | | | |



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID: SB-02-16.5-17.0RE SDG No.:

Matrix:

N5336

Lab Sample ID: N5336-06RE

Date Received:

SOIL

2

5000

SW8260 Analytical Method:

% Moisture:

uL

Sample Wt/Vol:

Units: g Final Vol: Test:

VOC-TCLVOA-10

Soil Aliquot Vol:

uL

GC Column:

RXI-624

5

ID: 0.25

Level:

LOW

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

Prep Batch ID

VY011273.D

11/02/22 19:13

VY110222

CAS Number

Parameter

Conc.

Qualifier

MDL

LOQ / CRQL

Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

HAZ -219



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:LiRo Engineers, Inc.Date Collected:10/27/22 10:40Project:DDC OEGS - Roadway Improvement in SwaimDate Received:10/27/22Client Sample ID:SB-02-COMPSDG No.:N5336

Lab Sample ID: N5336-07 Matrix: SOIL

% Solid: 100

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|------------------|-------|------|----|-------|------------|-------|----------------|----------------|----------|
| Corrosivity | 8.68 | Н | 1 | 0 | 0 | pН | | 10/30/22 07:29 | 9045D |
| Ignitability | NO | | 1 | 0 | 0 | oC | | 10/31/22 11:42 | 1030 |
| Reactive Cyanide | 0.050 | U | 1 | 0.050 | 0.050 | mg/Kg | 10/31/22 13:30 | 10/31/22 15:31 | 9012B |
| Reactive Sulfide | 10.0 | U | 1 | 10.0 | 10.0 | mg/Kg | 10/31/22 15:30 | 11/01/22 09:43 | 9034 |

Comments: pH result reported at temperature 20.6 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

HAM = 39 liked sample recovery not within control limits



Report of Analysis

Client: Date Collected: LiRo Engineers, Inc.

Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

SDG No.: Client Sample ID: SB-02-COMP N5336

Lab Sample ID: N5336-07 Matrix: **SOIL**

Analytical Method: 8015D DRO 13.8 Decanted: Sample Wt/Vol: 30.01 Units: Final Vol: 1 mL g

Test: Diesel Range Organics Soil Aliquot Vol: uL

Extraction Type: Injection Volume:

GPC Factor: PH:

Prep Batch ID File ID/Qc Batch: Dilution: Prep Date Date Analyzed FG011083.D 10/31/22 08:41 10/31/22 21:21 PB148682

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|------------------------------|-----------------|-------|-----------|----------|------------|-------------------|
| TARGETS
DRO | DRO | 1060 | J | 254 | 1930 | ug/kg |
| SURROGATES 16416-32-3 | Tetracosane-d50 | 13.0 | | 37 - 130 | 65% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

10/27/22

% Moisture:

() = Laboratory InHouse Limit

HAZ -221



Project:

284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client: Date Collected: LiRo Engineers, Inc.

> DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22

Client Sample ID: SDG No.: SB-02-COMP N5336

Lab Sample ID: N5336-07 Matrix: **SOIL** % Moisture:

Analytical Method: Sample Wt/Vol: 5.07 Units: Final Vol: 5 mL g

Test: Soil Aliquot Vol: иL Gasoline Range Organics

Extraction Type: Injection Volume:

GPC Factor: PH:

8015D GRO

Dilution: Date Analyzed Prep Batch ID File ID/Qc Batch:

FB103122 FB028802.D 50 10/31/22 17:38

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|-----------------------|-------------------------------|--------|-----------|----------|------------|-------------------|
| TARGETS
GRO | GRO | 207 | U | 207 | 2570 | ug/kg |
| SURROGATES
98-08-8 | Alpha,Alpha,Alpha-Trifluoroto | o 23.6 | | 50 - 150 | 118% | SPK: 20 |

Comments:

U = Not Detected

LOO = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

10/27/22

13.8

Decanted:

() = Laboratory InHouse Limit

HAZ -222



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client: Date Collected: LiRo Engineers, Inc. 10/27/22 Project: DDC OEGS - Roadway Improvement in Swaim Date Received: 10/27/22 Client Sample ID: SDG No.: SB-02-COMP N5336 Lab Sample ID: N5336-07 Matrix: **TCLP** Level (low/med): % Solid: low

| Cas | Parameter | Conc. | Qu | a. D | F MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-------|----|------|-------|------------|-------|----------------|----------------|----------|
| 7440-38-2 | Arsenic | 30.8 | U | 1 | 30.8 | 100 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |
| 7440-39-3 | Barium | 2980 | | 1 | 77.9 | 500 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |
| 7440-43-9 | Cadmium | 2.60 | U | 1 | 2.60 | 30.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |
| 7440-47-3 | Chromium | 130 | | 1 | 10.4 | 50.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |
| 7439-92-1 | Lead | 16.4 | U | 1 | 16.4 | 60.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |
| 7439-97-6 | Mercury | 0.70 | U | 1 | 0.70 | 2.00 | ug/L | 10/31/22 14:10 | 11/01/22 11:52 | SW7470A |
| 7782-49-2 | Selenium | 35.3 | U | 1 | 35.3 | 100 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |
| 7440-22-4 | Silver | 8.20 | U | 1 | 8.20 | 50.0 | ug/L | 11/01/22 13:00 | 11/01/22 23:12 | SW6010 |

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments: TCLP METALS

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence

of interference. OR = Over Range

HAZ -323 Spiked sample recovery not within control limits



Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22 Project: 10/27/22 DDC OEGS - Roadway Improvement in Swaim Date Received: Client Sample ID: TRIP-BLANK-1 SDG No.: N5336 Lab Sample ID: Matrix: Water N5336-08 Analytical Method: SW8260 % Moisture: 100

Sample Wt/Vol: 5 Units: mL Final Vol: 5000 uL
Soil Aliquot Vol: uL Test: VOC-TCLVOA-10

GC Column: DB-624UI ID: 0.18 Level: LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VX032461.D 1 10/28/22 15:49 VX102822

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|--------------------------------|-------|-----------|------|------------|-------|
| TARGETS | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.17 | U | 0.17 | 5.00 | ug/L |
| 74-87-3 | Chloromethane | 0.20 | U | 0.20 | 5.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.22 | U | 0.22 | 5.00 | ug/L |
| 74-83-9 | Bromomethane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 0.26 | U | 0.26 | 5.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 0.20 | U | 0.20 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.17 | U | 0.17 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | U | 0.23 | 5.00 | ug/L |
| 67-64-1 | Acetone | 1.20 | U | 1.20 | 25.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.26 | U | 0.26 | 5.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.18 | U | 0.18 | 5.00 | ug/L |
| 79-20-9 | Methyl Acetate | 0.53 | U | 0.53 | 5.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.34 | J | 0.18 | 5.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.20 | U | 0.20 | 5.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.20 | U | 0.20 | 5.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.20 | U | 1.20 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 0.82 | U | 0.82 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.18 | U | 0.18 | 5.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.17 | U | 0.17 | 5.00 | ug/L |
| 74-97-5 | Bromochloromethane | 0.19 | U | 0.19 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 0.18 | U | 0.18 | 5.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.18 | U | 0.18 | 5.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.13 | U | 0.13 | 5.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.18 | U | 0.18 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.27 | U | 0.27 | 5.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 0.17 | U | 0.17 | 5.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.18 | U | 0.18 | 5.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.87 | U | 0.87 | 25.0 | ug/L |
| 108-88-3 | Toluene | 0.17 | U | 0.17 | 5.00 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 0.14 | U | 0.14 | 5.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.16 | U | 0.16 | 5.00 | ug/L |

HAZ -224



Report of Analysis

Client:LiRo Engineers, Inc.Date Collected:10/27/22Project:DDC OEGS - Roadway Improvement in SwaimDate Received:10/27/22

Client Sample ID: TRIP-BLANK-1 SDG No.: N5336

Lab Sample ID: N5336-08 Matrix: Water

Analytical Method: SW8260 % Moisture: 100
Sample Wt/Vol: 5 Units: mL Final Vol: 5000

Soil Aliquot Vol: uL Test: VOC-TCLVOA-10

uL

GC Column: DB-624UI ID: 0.18 Level: LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VX032461.D 1 10/28/22 15:49 VX102822

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---------------|-----------------------------|--------|-----------|----------|------------|---------|
| 79-00-5 | 1,1,2-Trichloroethane | 0.19 | U | 0.19 | 5.00 | ug/L |
| 591-78-6 | 2-Hexanone | 0.76 | U | 0.76 | 25.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 5.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 0.14 | U | 0.14 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.18 | U | 0.18 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.17 | U | 0.17 | 5.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.17 | U | 0.17 | 5.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.33 | U | 0.33 | 10.0 | ug/L |
| 95-47-6 | o-Xylene | 0.18 | U | 0.18 | 5.00 | ug/L |
| 100-42-5 | Styrene | 0.13 | U | 0.13 | 5.00 | ug/L |
| 75-25-2 | Bromoform | 0.16 | U | 0.16 | 5.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 0.19 | U | 0.19 | 5.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.23 | U | 0.23 | 5.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 0.20 | U | 0.20 | 5.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.19 | U | 0.19 | 5.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.17 | U | 0.17 | 5.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.42 | U | 0.42 | 5.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.23 | U | 0.23 | 5.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.33 | U | 0.33 | 5.00 | ug/L |
| SURROGATES | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 49.0 | | 74 - 125 | 98% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 45.8 | | 75 - 124 | 92% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 47.8 | | 86 - 113 | 96% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 45.4 | | 83 - 123 | 91% | SPK: 50 |
| INTERNAL STAI | | | | | | |
| 363-72-4 | Pentafluorobenzene | 119000 | 5.556 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 199000 | 6.763 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 175000 | 10.055 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 81100 | 12.024 | | | |



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client: LiRo Engineers, Inc. Date Collected: 10/27/22

Project: DDC OEGS - Roadway Improvement in Swaim

10/27/22

Client Sample ID: TRIP-BLANK-1 SDG No.:

N5336

Lab Sample ID: N5336-08 Matrix:

SW8260 Analytical Method:

% Moisture:

Date Received:

Water 100

Sample Wt/Vol:

Units: mL

Final Vol:

5000

Soil Aliquot Vol:

uL

Test:

VOC-TCLVOA-10

GC Column:

DB-624UI

ID: 0.18

Level:

LOW

File ID/Qc Batch:

Dilution:

Prep Date

Date Analyzed

10/28/22 15:49

Prep Batch ID

VX032461.D

5

VX102822

CAS Number

Parameter

Conc.

Qualifier

MDL

LOQ / CRQL

Units

uL

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



APPENDIX E QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Work Order Letter No.OEHS-20201409798-WOL-231



Robert Kreuzer, PG

Program Manager – Environmental Project Manager

Education

B.S., Geological Science, State University of New York College at Buffalo, 1988

Licenses/Registrations

Professional Geologist, New York (originally issued in 2017)

Certifications

OSHA 40 Hazwoper

OSHA 30 Certified

OSHA 10 Certified

OSHA Confined Space Entry Certified

NYSDEC DER-25 Certified

Years with LiRo: 21
Years with Other Firms: 9

PROFESSIONAL PROFILE

Mr. Kreuzer is a Program Manager who has over 30 years of experience in New York 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 City (NYC) 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 NYC. 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.

LIRO EXPERIENCE - 1997 - PRESENT

New York City Department of Design and Construction (NYCDDC) Office of Environmental and Geotechnical Services (OEGS), Requirements Contract for Environmental Services, NY: 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. Hundreds of 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.

NYCDDC Remediation Program, NY: 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.

NYCDDC, Underground Storage Tank (UST) Program, NY, Project Geologist and Technical Lead for Corrective Action Investigations: NYCDDC is engaged in a major program to clean up the Cityowned petroleum contaminated sites. Through this, LiRo was hired to provide services necessary and required for the remediation and monitoring of City-owned petroleum contaminated soil and ground water, to ensure compliance with all local, state and federal laws, rules and regulations, including without limitation, compliance with all protocols required by the NYSDEC. The scope of work for these contracts consists of construction management and engineering design services for investigation of site conditions; remediation and monitoring of soil and groundwater petroleum contamination; and upgrading, replacement or decommissioning of petroleum product storage tanks.

New York City School Construction Authority (NYCSCA) On-Call Asbestos and Lead Paint Services, NY: Program Manager for asbestos/lead/polychlorinated biphenyl (PCB) inspection, design and abatement monitoring projects. Approximately 1,000 separate projects have been executed and requisitioned over the course of 2 continuous contracts valued at over \$4M. Asbestos and lead inspection/design/remediation have been conducted in connection with capital

improvements to NYC schools throughout the 5 boroughs including climate control upgrades, roofing system replacements, façade restorations, classroom conversions, elevator installations, new playgrounds, window replacements, and electrical upgrades associated with new fire alarm systems and computer centers.

Dormitory Authority of the State of New York (DASNY) On-Call Environmental Services, NY: Program Manager for asbestos, lead paint, and mold consulting services for DASNY capital improvement projects at hospitals and universities throughout New York State (NYS). Work orders in combined excess of \$1M since 2008 have been issued in connection with façade, roof, window, emergency power systems, and full facility demolition work. All project efforts from inspection/design through abatement management are coordinated with the DASNY Project Manager at each facility as well as the DASNY Code Compliance Officers. Inspections typically require review of architectural and mechanical, electrical, and plumbing (MEP) specifications to determine affected areas of the facility and the extent of impact to hazardous/regulated materials. Remediation designs are followed by detailed design review meetings. Abatement management includes review and approval of contractor pre-work submittals, monitoring of abatement activities, waste tracking, and area air testing.

TWA Flight Center Hotel Project, John F. Kennedy (JFK) International Airport, Program Manager: LiRo is responsible for implementing the Soil, Groundwater, and Environmental Management Plan (SGEMP) during the construction of the TWA Flight Center Hotel at JFK International Airport. LiRo is performing general environmental oversight during the construction activities. The oversight includes, but is not limited to: monitoring excavation and soil loading activities including segregating and staging soil; monitoring air quality during activities around impacted areas; monitoring dewatering activities and adhering to associated discharge permits; documenting and reporting site activities on a weekly basis; and, overseeing general environmental compliance issues.

New York City Mayor's Office of Environmental Remediation (MOER) Environmental Consulting Services, NY: Program Manager for a multi-site task order based contract to conduct USEPA-compliant 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 State Office of General Services (NYSOGS) 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.

New York Power Authority (NYPA) Asbestos and Lead Planning Services, NY, Program Manager: LiRo is providing NYPA Energy Services and Technology with regulatory consulting services statewide in connection with energy efficiency improvement projects affecting building structures and systems. These services are focused upon identifying, quantifying, and assessing asbestos-containing materials (ACM) and lead based paints (LBP) impacted by the proposed efficiency improvements. Related services include the identification of broader hazardous and universal waste materials and bulk PCB materials.

PREVIOUS EXPERIENCE

URS Corporation – 1989 – 1997 Recra Environmental, Inc. – 1987 -1988



Stephen Frank, PG

Environmental Project Manager

Education

B.S., Geology, Cleveland State University, 1986

Post Baccalaureate Studies, Geology, Engineering Geology, and GIS, SUNY at Buffalo, 1989

Licenses/Registrations

Professional Geologist, New York (originally issued in 2017)

National Ground Water Association

Certifications

OSHA 40 Hr. Hazwoper

OSHA 30 Certified

OSHA 10 Certified

NJDEP UST Certification-Testing

NJDEP UST Certification-Closure

NJDEP UST Certification-Subsurface Evaluation

American Red Cross Standard First Aid and Adult CPR

> Years with LiRo: 20 Years with Other Firms: 9

PROFESSIONAL PROFILE

Mr. Frank is an Environmental Project Manager with more than 29 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. Over 20 years of his experience has included task-order based contracts within the New York City (NYC) area. He has extensive experience working on NYC re-development projects under the City Environmental Quality Review (CEQR) program and with the New York State Department of Environmental Conservation (NYSDEC) under various brownfield and consent order programs. He also has specialized experience coordinating field investigation, reporting, and design tasks for work-order based contracts through NYC based organizations such as New York City Department of Design and Construction (NYCDDC) Office of Environmental and Geotechnical Services (OEGS), New York City Health and Hospitals Corporation (NYCHHC), and New York City Mayor's Office of Environmental Remediation (MOER), among others.

LIRO EXPERIENCE - 1998 - PRESENT

New York City Department of Design and Construction (NYCDDC) Office of Environmental and Geotechnical Services (OEGS), Requirements Contract for Environmental Services, NY: 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. Hundreds of 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.

NYCDDC Remediation Program, NY: Mr. Frank was the Project Technical Lead Investigator for the implementation of a comprehensive site investigation and remediation program at NYC 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 NYC with bidding assistance, and provided construction oversight for the remedial system construction.

NYCHHC, NY: Provided Senior Technical Reporting Services for projects performed under two consecutive on-call service contracts since 2008. Mr. Frank's role placed particular emphasis on petroleum storage compliance and spill investigation remedial planning. Duties included interface with facility managers to evaluate project scope of work and budget, perform senior author review of all reports, remediation alternatives analysis, and remedial action plans.

MOER Environmental Consulting Services, NY: Project Technical Lead Scientist for a multi-site task order based contract to conduct United States Environmental Protection Agency (USEPA)-compliant 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 ESSA, Phase II investigations, and petroleum tank audits at more than 20 sites.

New York City School Construction Authority (NYCSCA) Environmental Consulting Services, NY: Mr. Frank serves as a Senior Environmental Scientist for this comprehensive on-call environmental consulting services term contract. To date, the project work has included oversight of domestic water system disinfection procedures at over a 150 schools, peer reviews of Phase I and Phase II report submittals from other SCA consultants, Phase I ESA, implement underground storage tank (UST) removal, and UST closure/spill investigations, soil vapor intrusion/indoor air quality investigations, and on-call emergency spill response. Under this term contract, LiRo has successfully completed over 180 work order assignments for a diverse range of sites throughout the City of New York.

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 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.

TWA Flight Center Hotel Project, John F. Kennedy International Airport - LiRo is responsible for implementing the Soil, Groundwater, and Environmental Management Plan during the construction of the TWA Flight Center Hotel at JFK International Airport. LiRo is performing general environmental oversight during the construction activities. The oversight includes, but is not limited to: monitoring excavation and soil loading activities including segregating and staging soil; monitoring air quality during activities around impacted areas; monitoring dewatering activities and adhering to associated discharge permits; documenting and reporting site activities on a weekly basis; and, overseeing general environmental compliance issues.

JetBlue Airlines, JFK International Airport Terminal 6 Remediation, NY - Subsequent to the opening of Terminal 5, LiRo was again retained exclusively by JetBlue to perform a full facility inspection of Terminal 6. LiRo mobilized a large team of six Inspectors and coordinated access with Port Authority (PANYNJ) throughout the effort which lasted several weeks. Progress meetings were held on site with PANYNJ representatives and design specifications were generated for the abatement of document ACM that included a variance application for the removal of sprayapplied fireproofing above the passenger area. LiRo staff managed the abatement of asbestos and the remediation of all other hazardous materials, and performed project scheduling, managed field staff, reviewed contractor regulatory notifications, interfaced with site representatives, tracked costs for billing completed the abatement survey and design report and the asbestos abatement project specification.

PREVIOUS EXPERIENCE URS Corporation – 1990 – 1998



Education

B.S., Geology/Environmental Science, State University of New York College at Cortland, 1994

Certifications

OSHA 40 Hazwoper Certified

OSHA 30 Certified

OSHA 10 Certified

ASTM Environmental Assessments for Commercial Real Estate

Years with LiRo: 8
Years with Other Firms: 13

PROFESSIONAL PROFILE

Ms. Hewson is a Project Scientist with over 21 years of experience including managing, coordinating, and supervising environmental investigations and remediation. 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 (NYC). Ms. Hewson has worked on task-order based contracts within the NYC area for approximately eight years. 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). Mr. Hewson's experience includes interpreting construction drawings and specifications and knowledge of NYSDEC regulations.

LIRO EXPERIENCE - 2010 - PRESENT

New York City Department of Design and Construction (NYCDDC) Office of Environmental and Geotechnical Services (OEGS) Requirements Contract for Environmental Services, NY: 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, evaluated soil/groundwater/sediment data, prepared Phase II reports. Her role under the program also include project tracking and status updates.

New York City Mayor's Office of Environmental Remediation (MOER), NY, Environmental Services: Environmental Scientist to perform Phase I and Phase II ESAs in support of MOER brownfield programs in NYC. Ms. Hewson has assisted in completing the Phase I ESAs in accordance with ASTM, United States Environmental Protection Agency (USEPA) Brownfield Assessment Grant Program, and client-specific requirements/standards. Ms. Hewson has also developed and implemented Phase II Investigation work plans and prepared Phase II Investigation reports with evaluations of NYSDEC and USEPA soil and groundwater standards.

Monadnock Construction, Inc., Multiple Sites: 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.

Liberty Industrial Finishing, Farmingdale, NY: Project Scientist 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 (NPL) and has undergone remediation by the Responsible Party (RP) under USEPA supervision. LiRo developed excavation and disposal plans, health and safety plans (HASPs) and the Community Air Monitoring Plan (CAMP) that were implemented for the remedial work. In addition, LiRo prepared a Site Management Plan (SMP) 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 John F. Kennedy (JFK) International Airport: Environmental Scientist 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: Environmental Scientist for the environmental remediation phase of JetBlue's Terminal 5 redevelopment 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.

Monroe County On-Call Environmental Term Contract, NY: Senior Environmental Analyst for a term contract to provide professional engineering and support services in connection with ESAs of properties and hazardous material surveys for the presence or potential of hazardous substance, pollutant, or containment which might impede its redevelopment or reuse.

Niagara County Department of Economic Development (NCDED) – Phase I and Phase II ESAs at Priority Brownfield Sites in Niagara County, NY: Senior Environmental Analyst for the NCDED projects in Niagara County, NY under a USEPA Brownfield grant program. LiRo has been contracted to perform Phase I and Phase II ESAs in support of NCDED brownfield programs in Niagara County, NY. 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 and Quality Assurance Project Plan (QAPP) in conformance with USEPA standards.

City of Rochester Environmental Term Services, NY: LiRo has been retained by the City of Rochester Department of Environmental Services to perform due diligence Phase I and Phase II site investigations of properties prior to acquisition, sale, condemnation, or foreclosure. Other services under this contract include remedial investigation, feasibility study, cost estimation, geotechnical investigation, work plan preparation, environmental engineering, site inspection, remedial services and pollution prevention and sustainability services.

PREVIOUS EXPERIENCE

Groundwater and Environmental Services, Inc. (GES), Project Manager (2/07-11/09): Ms. Hewson oversaw, managed, and reviewed all aspects of the EMES retail petroleum remediation account ranging between 21 and 54 projects. She helped the major accomplishment, which included, the management of all aspects of a \$3.4 million dollar remedial excavation. Such included the coordination with various subcontractors, numerous staff members, NYSDEC, NYSTA, and a separate lessee of the facility. Developed/tracked annual proposals, change orders, and budgets for all projects within account totaling over \$5.4 million one year. Assisted in the development/tracking of an Excel spreadsheet to track monthly spends on each individual project based upon specific categories. Forecasted spends on all projects for the next five years. Routine communications with NYSDEC on projects along with other regulators, as needed. Direct communication with EMES Project Manager on a daily basis on project status, changes in activities, budgets, etc. Directly involved in all work plans, assessment reports, remedial action plans, and completed remedial action reports for all projects. Adhered to GES and EMES policies and procedures, including the LPS Safety Program.

Lender Consulting Services, Inc. (LCS), Vice President, Due Diligence Services (6/98-11/04): Oversaw, managed, and reviewed over 5,000 Phase I, Transaction Screen, and EAQuick ESAs throughout the Northeastern United States for various lending agencies and private organizations. Reports include the collection/evaluation of topographic maps, database searches, soil/geologic information, historical records, municipal records, aerial photographs, site reconnaissance, and review of all previous site investigation reports. Involved in the hiring of report writers and field technicians for the Due Diligence Department (DDD).



Eva Jakubowska

Project Scientist

Education

B.A., History/Environmental Science, Brooklyn College, 2003

> A.S., Business Administration, Brooklyn College, 2003

Licenses/Registrations

USEPA Lead Risk Assessor (Originally Issued in 2009)

Certifications

OSHA 40 Hazwoper Certified

OSHA 30 Certified

OSHA Confined Space Entry Certified

Airtek 4-hour Mold Awareness

NYSDEC Erosion and Sediment Control

Years with LiRo: 8
Years with Other Firms: 8

PROFESSIONAL PROFILE

Ms. Jakubowska is a Project Scientist with over 16 years of experience performing New York City (NYC) area Phase I/II Environmental Site Assessments (ESAs), hazardous material assessments, spill investigations, brownfield site investigations, soil and ground water sampling, mold and asbestos surveys, lead investigations, and oversight of remediation systems operation and monitoring. Ms. Jakubowska has also performed mold air sampling and mold surveys. Her experience also includes interpreting construction drawings and specifications and knowledge of NYSDEC regulations.

LIRO EXPERIENCE - 2011 - PRESENT

New York City Department of Design and Construction (NYCDDC) Office of Environmental and Geotechnical Services (OEGS) Requirements Contract for Environmental Services, NY: Ms. Jakubowska served as Environmental Scientist for work-order based contract to perform Phase I/Phase II ESAs and corridor studies in support of NYCDDC property acquisition and corridor rehabilitation projects. Hundreds of task orders have been issued and completed. She is LiRo's lead field scientist and has performed all aspects of Phase I site inspections as well as Phase II site investigation field work including drilling supervision, borehole logging, monitoring well installation, subsurface soil sampling, and groundwater sampling. She also has provided CAMP monitoring, SWPPP inspection, UST closure oversight and other specialized services.

NYCDDC Site Remediation System Monitoring, Five Boroughs, NY: Ms. Jakubowska was the Environmental Technician responsible for collecting monitoring data and evaluating system performance at active remediation sites through the NYCDDC. Primary duties included the collection of subsurface pressure data, measurement of groundwater/product levels in wells, collection of remedial system influent and effluent samples, and recording system operating parameters.

New York City School Construction Authority (NYCSCA), NY: Ms. Jakubowska performed site assessments for the construction and renovation of New York City Public Schools. Her responsibilities included the performance of Phase I ESAs, Phase II Environmental Site Investigations (ESIs), polychlorinated biphenyl (PCB) remediation, and Outdoor/Indoor Air Assessments.

New York City Economic Development Corporation (NYCEDC) Hunters Point South (HPS) Development Project, Queens, NY: Ms. Jakubowska served as environmental monitor for the Waterfront Park and infrastructure development project in Queens for the NYCEDC. The project involved conversion of the site from a 60-acre abandoned sports complex to a complex community center complete with a public school, and retail, residential, and park facilities. Contaminants at the site included historic fill, creosote soaked timbers from former bulkhead structures, and petroleum contamination from underground storage tanks (USTs). Her duties included oversight of excavation work and segregation of various waste streams, dust monitoring oversight, soil and groundwater sampling in potential petroleum contamination areas, UST and spill closure investigations, waste characterization testing of stockpiled soil, and oversight of soil transport and disposal activities.

Queens West Development Site, NY: Ms. Jakubowska served as a Project Scientist for post-excavation remedial activities at the Queens West Development site. She supervised the installation of monitoring wells including monitoring well development and groundwater sampling.

Long Island Railroad (LIRR), Morris and Richmond Hill Yard Parks, Queens, NY: Ms. Jakubowska served as a Project Scientist for the LIRR project in Queens, NY. Her responsibilities included conducting groundwater sampling events and Nitrate sampling events.

New York City Department of Environmental Protection (NYCDEP), NY: Ms. Jakubowska served as a Project/Environmental Manager handling NYCDEP "E" Designation projects from start until final construction, including closure reports.

Con Edison, Inc., Nevins Street, Brooklyn, NY: Ms. Jakubowska served as a Project Scientist and performed air monitoring during the demolition of Con Edison substations.

Con Edison, Inc., Amoco Rainey Remediation Project, NY: Ms. Jakubowska served as a Scientist/Air Monitoring Technician who was responsible for reviewing contractor submittals and preparing reports.

AIMCO Apartments, NYC, NY: Ms. Jakubowska served as Lead Risk Assessor and performed industrial hygiene sampling including building investigations, risk assessments, and clearance testing for lead hazards.

Monadnock Construction, Inc. (Monadnock) Hunters Point South (HPS) Development Project, Queens, NY: Ms. Jakubowska served as environmental monitor for the Waterfront Park and infrastructure development project in Queens for Monadnock. As indicated above, the project involved conversion of the site from a 60-acre abandoned sports complex to a complex community center complete with a public school and retail, residential, and park facilities. Contaminants at the site included historic fill, creosote soaked timbers from former bulkhead structures, and petroleum contamination from USTs. Her duties included completion of a subsurface investigation, Storm Water Pollution Prevention (SWPP) inspections, excavation oversight and waste tracking, and oversight of vapor barrier installation activities.

PREVIOUS EXPERIENCE

Shaw Environmental & Infrastructure, Inc., Holbrook, NY, Scientist II - (2010-2010)

TRC Engineers, Inc., New York, NY, Project Scientist - (2008-2010)

Hydro Tech Environmental, Inc., Brooklyn, NY, Project Manager - (2005-2008)



APPENDIX F STATEMENT OF LIMITATIONS

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Work Order Letter No.OEHS-20201409798-WOL-231



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.

LiRo Engineers, Inc.
DDC CAPIS ID No. SANDHWSIB

December 13, 2022

Work Order Letter No.OEHS-20201409798-WOL-231

JB-PAGES (5.0)

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)

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SECTION E. PRIVATE UTILITIES SCOPE OF WORK

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SECTION A – JOINT BID 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.
 - "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. "Price List Work" will mean work to be performed under the Price List items, excluding JB Specialty Items and Bid Items.
 - 6. "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.
 - 7. "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.
 - 8. "Specialty Contractor" will mean a contractor provided and paid for by the Utility, which may include the Utilities' in-house field forces.
 - 9. "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.
 - 10. "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.
 - 11. "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 JB Specialty Items, as described in Section A.2 below.
- 12. "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.
- 13. "Utility" or "Utilities" will mean the utility entities participating in this Joint Bid Project.
- 14. "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. Overtime costs incurred during the performance of the Price List Work are reimbursable in accordance with Section G.2 below
 - 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:

- 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:
 - 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:

1. Acceleration of 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 nonscheduled 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.

2. Overtime on Price List Work

When Price List Work is performed off shift or on weekends, 100% of the premium portions of overtime pay will be paid under this Section.

For clarity, overtime pay on Price List Work performed during the hours stated in the OCMC Traffic Stipulations included in the solicitation is eligible for reimbursement under this article.

Such overtime costs will be paid under the appropriate JB FS Item in accordance with the requirements of Articles 25 and 26 of the Standard Construction Contract, with no compensation for overhead and profit.

Payment made under this Section will 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. <u>Refer</u> 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. <u>Refer</u> to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article A. <u>Description</u>;

<u>Delete</u> the last four lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . . ";

<u>Substitute</u> 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. <u>Refer</u> to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article B. <u>Materials</u>;

<u>Delete</u> the first sentence in its entirety, beginning with the words: "Furnish Controlled Low Strength Material fill or backfill . . ."; <u>Substitute</u> 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. <u>Refer</u> to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article A. <u>Description</u>;

<u>Delete</u> the last five lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . . ";

<u>Substitute</u> 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. <u>Refer</u> to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article B. Materials;

<u>Delete</u> the first sentence in its entirety, beginning with the words: "Furnish controlled low strength material fill or backfill . . . ";

<u>Substitute</u> 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 <u>Applicability</u>. 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 <u>The Utilities' Responsibilities</u>. 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 <u>No Extra Or Disputed Work</u>. 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 <u>Joint Bid Projects</u>. 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 <u>Pre-Arbitration Procedures</u>.

- 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. NYC JOINT BID ITEM PRICE LIST

| Item No. | Item Description | Unit | Price |
|----------|---|------|----------|
| JB 100.1 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .1) | EACH | \$ 620 |
| JB 100.2 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .2) | EACH | \$ 929 |
| JB 100.3 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .3) | EACH | \$ 1,219 |
| JB 100.4 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .4) | EACH | \$ 1,482 |
| JB 100.5 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .5) | EACH | \$ 2,039 |
| JB 100.6 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .6) | EACH | \$ 2,179 |
| JB 100.7 | UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION (TYPE .7) | EACH | \$ 2,363 |
| JB 101.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1) | EACH | \$ 3,099 |
| JB 101.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2) | EACH | \$ 3,556 |
| JB 101.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3) | EACH | \$ 4,796 |
| JB 101.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .4) | EACH | \$ 5,075 |
| JB 101.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .5) | EACH | \$ 6,144 |
| JB 101.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .6) | EACH | \$ 6,723 |
| JB 101.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .7) | EACH | \$ 6,805 |
| JB 102.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1) | EACH | \$ 3,861 |
| JB 102.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2) | EACH | \$ 4,338 |
| JB 102.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .3) | EACH | \$ 5,176 |
| JB 102.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .4) | EACH | \$ 5,919 |
| JB 102.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .5) | EACH | \$ 6,558 |
| JB 102.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .6) | EACH | \$ 6,945 |
| JB 102.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .7) | EACH | \$ 8,151 |
| JB 103.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1) | EACH | \$ 4,525 |
| JB 103.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .2) | EACH | \$ 5,318 |

| Item No. | Item Description | Unit | Price |
|----------|---|------|----------|
| JB 103.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .3) | EACH | \$ 6,616 |
| JB 103.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .4) | EACH | \$ 7,779 |
| JB 103.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .5) | EACH | \$ 9,308 |
| JB 103.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .6) | EACH | \$ 9,978 |
| JB 103.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMATER (TYPE .7) | EACH | \$10,648 |
| JB 104.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .1) | EACH | \$ 4,982 |
| JB 104.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .2) | EACH | \$ 5,510 |
| JB 104.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .3) | EACH | \$ 6,575 |
| JB 104.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .4) | EACH | \$ 7,388 |
| JB 104.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .5) | EACH | \$ 8,602 |
| JB 104.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .6) | EACH | \$ 9,000 |
| JB 104.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER (TYPE .7) | EACH | \$ 9,568 |
| JB 105.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .1) | EACH | \$ 5,343 |
| JB 105.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .2) | EACH | \$ 5,913 |
| JB 105.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .3) | EACH | \$ 7,304 |
| JB 105.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .4) | EACH | \$ 8,506 |
| JB 105.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .5) | EACH | \$10,209 |
| JB 105.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .6) | EACH | \$10,831 |
| JB 105.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER (TYPE .7) | EACH | \$10,150 |
| JB 106.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .1) | EACH | \$ 5,584 |
| JB 106.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .2) | EACH | \$ 6,161 |
| JB 106.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .3) | EACH | \$ 7,595 |
| JB 106.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .4) | EACH | \$ 8,828 |

| Item No. | Item Description | Unit | Price |
|----------|---|------|----------|
| JB 106.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .5) | EACH | \$10,460 |
| JB 106.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .6) | EACH | \$11,090 |
| JB 106.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER (TYPE .7) | EACH | \$11,719 |
| JB 107.1 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .1) | EACH | \$ 5,894 |
| JB 107.2 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .2) | EACH | \$ 6,583 |
| JB 107.3 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .3) | EACH | \$ 8,017 |
| JB 107.4 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .4) | EACH | \$ 9,305 |
| JB 107.5 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .5) | EACH | \$11,170 |
| JB 107.6 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .6) | EACH | \$11,598 |
| JB 107.7 | UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER (TYPE .7) | EACH | \$12,026 |
| JB 108.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1) | EACH | \$ 945 |
| JB 108.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2) | EACH | \$ 1,627 |
| JB 108.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3) | EACH | \$ 2,317 |
| JB 108.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4) | EACH | \$ 2,959 |
| JB 108.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .5) | EACH | \$ 3,450 |
| JB 108.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .6) | EACH | \$ 3,864 |
| JB 108.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .7) | EACH | \$ 4,735 |
| JB 109.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1) | EACH | \$ 1,370 |
| JB 109.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2) | EACH | \$ 1,904 |
| JB 109.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3) | EACH | \$ 2,576 |
| JB 109.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4) | EACH | \$ 3,298 |
| JB 109.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5) | EACH | \$ 3,822 |
| JB 109.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .6) | EACH | \$ 4,284 |

| Item No. | Item Description | Unit | Price |
|----------|--|------|----------|
| JB 109.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .7) | EACH | \$ 4,440 |
| JB 110.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1) | EACH | \$ 1,786 |
| JB 110.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2) | EACH | \$ 2,302 |
| JB 110.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3) | EACH | \$ 2,971 |
| JB 110.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4) | EACH | \$ 3,753 |
| JB 110.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .5) | EACH | \$ 4,391 |
| JB 110.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .6) | EACH | \$ 5,050 |
| JB 110.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .7) | EACH | \$ 5,906 |
| JB 111.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1) | EACH | \$ 2,224 |
| JB 111.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2) | EACH | \$ 2,976 |
| JB 111.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3) | EACH | \$ 3,959 |
| JB 111.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4) | EACH | \$ 5,038 |
| JB 111.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .5) | EACH | \$ 5,947 |
| JB 111.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .6) | EACH | \$ 6,745 |
| JB 111.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .7) | EACH | \$ 8,427 |
| JB 112.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .1) | EACH | \$ 2,220 |
| JB 112.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .2) | EACH | \$ 2,877 |
| JB 112.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .3) | EACH | \$ 3,993 |
| JB 112.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .4) | EACH | \$ 5,147 |
| JB 112.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .5) | EACH | \$ 6,037 |
| JB 112.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .6) | EACH | \$ 6,794 |
| JB 112.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" AND UP TO 54" DIAMETER (TYPE .7) | EACH | \$ 8,029 |
| JB 113.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .1) | EACH | \$ 2,557 |

| Item No. | Item Description | Unit | Price |
|----------|--|------|----------|
| JB 113.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .2) | EACH | \$ 3,464 |
| JB 113.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .3) | EACH | \$ 4,602 |
| JB 113.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .4) | EACH | \$ 5,784 |
| JB 113.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .5) | EACH | \$ 6,644 |
| JB 113.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .6) | EACH | \$ 7,488 |
| JB 113.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" AND UP TO 60" DIAMETER (TYPE .7) | EACH | \$ 8,714 |
| JB 114.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .1) | EACH | \$ 2,699 |
| JB 114.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .2) | EACH | \$ 3,897 |
| JB 114.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .3) | EACH | \$ 5,850 |
| JB 114.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .4) | EACH | \$ 7,595 |
| JB 114.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .5) | EACH | \$ 8,990 |
| JB 114.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .6) | EACH | \$ 9,950 |
| JB 114.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" AND UP TO 72" DIAMETER (TYPE .7) | EACH | \$10,260 |
| JB 115.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .1) | EACH | \$ 3,112 |
| JB 115.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .2) | EACH | \$ 4,458 |
| JB 115.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .3) | EACH | \$ 6,569 |
| JB 115.4 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .4) | EACH | \$ 8,658 |
| JB 115.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .5) | EACH | \$10,240 |
| JB 115.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .6) | EACH | \$11,241 |
| JB 115.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" AND UP TO 84" DIAMETER (TYPE .7) | EACH | \$11,633 |
| JB 116.1 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .1) | EACH | \$ 3,377 |
| JB 116.2 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .2) | EACH | \$ 4,852 |
| JB 116.3 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .3) | EACH | \$ 7,016 |

| Item No. | Item Description | Unit | Price |
|------------|--|--------------|----------|
| JB 116.4 | JTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .4) | | \$ 9,344 |
| JB 116.5 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .5) | EACH \$11,08 | |
| JB 116.6 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .6) | EACH \$12 | |
| JB 116.7 | UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 84" (TYPE .7) | EACH | \$12,592 |
| JB 200 | EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES | L.F. | \$ 261 |
| JB 225.1A | INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES | EACH | \$ 4,352 |
| JB 225.1B | INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES AT AN ADDITIONAL DEPTH OF UP TO 3 FEET | EACH | \$ 4,925 |
| JB 225.2A | INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES | EACH | \$ 2,176 |
| JB 225.2B | INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES AT AN ADDITIONAL DEPTH OF UP TO 3 FEET | EACH | \$ 2,749 |
| JB 225.3A | REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES | EACH | \$ 1,998 |
| 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. | \$ 338 |
| JB 300.1 | SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH LESS THAN 5' DEEP | C.Y. | \$ 281 |
| JB 300.2 | SPECIAL CARE EXCAVATION AND BACKFILLING IN TRENCH GREATER THAN 5' DEEP | C.Y. | \$ 319 |
| JB 301 | SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPE | C.Y. | \$ 427 |
| JB 303 | FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL | C.Y. | \$ 224 |
| JB 306 | SPECIAL CARE EXCAVATION AND BACKFILLING WITHIN A CITY TRENCH | C.Y. | \$ 294 |
| JB 330E | SUPPORT AND PROTECTION OF UTILITY FACILITIES DURING EXCAVATION | L.F. | \$ 192 |
| JB 330G | SUPPORTS FOR PARALLEL FULLY EXPOSED GAS MAINS IN TRENCH | EACH | \$ 1,764 |
| | 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. | \$ 166 |
| JB 330T2.1 | COMMUNICATIONS FACILITY OPERATOR(S) REQUESTS THE TRENCH BE WIDENED | L.F. | \$ 373 |
| JB 330T2.2 | COMMUNICATION FACILITY OPERATOR(S) REQUESTS THE TRENCH / SHEETING BE MODIFIED | L.F. | \$ 483 |

| Item No. | Item Description | | Price |
|------------|--|------|----------|
| JB 351 | INSTALL AND REMOVE "A" FRAME ON UTILITY POLES | EACH | \$ 1,533 |
| JB 400 | TEST PITS FOR UTILITY FACILITIES | C.Y. | \$ 355 |
| JB 401 | TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES | C.Y. | \$ 380 |
| JB 401A | SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT | C.Y. | \$ 378 |
| JB 401AC | SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF CABLE TV FACILITIES CONNCETED TO THE BASE PAVEMENT | C.Y. | \$ 378 |
| JB 401AT | SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF TELECOMMUNICATION FACILITIES CONNECTED TO OR NEAR THE BASE PAVEMENT | C.Y. | \$ 378 |
| JB 402.1 | EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT | L.F. | \$ 76 |
| JB 402.1A | EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | L.F. | \$ 87 |
| JB 402.2 | EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT | L.F. | \$ 50 |
| JB 402.2A | EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | L.F. | \$ 62 |
| JB 402T.1 | EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT | L.F. | \$ 76 |
| JB 402T.1A | EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | L.F. | \$ 83 |
| JB 402T.2 | EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT | L.F. | \$ 55 |
| JB 402T.2A | EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | L.F. | \$ 71 |
| 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. | \$ 107 |
| JB 402T.J1 | EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT | L.F. | \$ 76 |

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| Item No. | | | Pr | ice |
|-------------|--|------|----|-----|
| JB 402T.J1A | EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT -
JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT | L.F. | | 86 |
| JB 402T.J2 | EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT | L.F. | \$ | 63 |
| JB 402T.J2A | EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT - JOINTS BROKEN OUT AND CONDUITS REMAIN INTACT | L.F. | \$ | 71 |
| JB 402T.R1A | EXISTING CONCRETE ENCASED STEEL/IRON CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | | \$ | 79 |
| JB 402T.R2A | EXISTING NON - CONCRETE ENCASED STEEL/IRON CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | | \$ | 63 |
| JB 402T.V1 | EXISTING VACANT CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT | | \$ | 78 |
| JB 402T.V1A | EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | | \$ | 53 |
| JB 402T.V2 | EXISTING VACANT NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT | | \$ | 65 |
| JB 402T.V2A | EXISTING VACANT NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT | | \$ | 73 |
| JB 405.1 | TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET | C.Y. | \$ | 398 |
| JB 405.2 | TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING | C.Y. | \$ | 482 |
| JB 406 | EXCAVATION FOR UTILITY STRUCTURE | C.Y. | \$ | 332 |
| JB 410.1 | MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1) | C.Y. | \$ | 397 |
| JB 410.2 | MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2) | | \$ | 473 |
| JB 410.3 | MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% (TYPE .3) | C.Y. | \$ | 553 |

| Item No. | Item Description | Unit | Price |
|-----------|---|---------|----------|
| JB 410.4 | MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% (TYPE .4) | C.Y. | \$ 682 |
| 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. | \$ 772 |
| 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. | \$ 809 |
| 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. | \$ 897 |
| 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. | \$ 985 |
| JB 450.1 | CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1) | CREW/HR | \$ 382 |
| JB 450.2 | CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2) | CREW/HR | \$ 538 |
| JB 450.3 | CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3) | CREW/HR | \$ 1,294 |
| JB 450.5 | CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .5) PIPE-RIPPING SUPPORT | CREW/HR | \$ 1,089 |
| JB 636 EA | ADJUSTMENT OF UTILITY HARDWARE (UNDER 7" WIDTH) | EACH | \$ 229 |
| JB 636 EB | ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH) | EACH | \$ 385 |
| JB 636 EC | ADJUSTMENT OF UTILITY HARDWARE (14" TO UNDER 30" WIDTH) | EACH | \$ 981 |
| JB 636 ED | ADJUSTMENT OF UTILITY HARDWARE (30" TO UNDER 34" WIDTH) | EACH | \$ 1,029 |
| JB 636 EE | ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH) | EACH | \$ 1,176 |
| JB 636 EG | ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75" WIDTH) | EACH | \$ 1,323 |
| JB 636 EH | ADJUSTMENT OF UTILITY HARDWARE (75" TO UNDER 125" WIDTH) | EACH | \$ 1,485 |
| JB 636 EI | ADJUSTMENT OF UTILITY HARDWARE (125" TO UNDER 170" WIDTH) | EACH | \$ 1,638 |
| JB 636 MA | ADJUSTMENT OF UTILITY HARDWARE 7" to 30" MILLING / RESURFACING | EACH | \$ 140 |
| JB 636 MB | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (7" TO UNDER 14" WIDTH) | EACH | \$ 169 |
| JB 636 MC | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (14" TO UNDER 30" WIDTH) | EACH | \$ 184 |
| JB 636 MD | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (30" TO UNDER 34" WIDTH) | EACH | \$ 198 |

| Item No. | Item Description | | Pric | ce |
|-----------|--|------|--------|-----|
| JB 636 ME | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (34" TO UNDER 41" WIDTH) | EACH | \$ 2 | 223 |
| JB 636 MG | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (41" TO UNDER 75" WIDTH) | EACH | \$ 2 | 253 |
| JB 636 MH | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (75" TO UNDER 125" WIDTH) | EACH | \$ 2 | 287 |
| JB 636 MI | MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (125" TO UNDER 170" WIDTH) | EACH | \$ 3 | 323 |
| JB 636 SB | ADJUSTMENT TO UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH) | EACH | \$ 2 | 263 |
| JB 636 SC | ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH) | EACH | \$ 7 | 778 |
| JB 700 | SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER | | \$ 1 | 146 |
| JB 711 | USE SHEETING LINE AS FORM | L.F. | \$ | 7 |
| JB 781 | REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS | EACH | \$ 1,7 | 742 |
| JB 798 | MODIFICATION OF NON-CONCRETE YOKE TROLLEY STRUCTURES REMOVAL WHEN CROSSING UTILITY FACILITIES | L.F. | \$ 3 | 359 |
| JB 799 | MODIFICATION OF NON-CONCRETE YOKE TROLLEY STRUCTURES REMOVAL PARALLEL TO UTILITY FACILITIES | | \$ 1 | 113 |
| JB 800 | MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES | L.F. | \$ 2 | 269 |
| JB 801 | MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES | L.F. | \$ 1 | 137 |
| JB 802A | SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK | S.F. | \$ | 6 |
| JB 802B | SPECIAL CARE EXCAVATION AND RESOTRATION FOR CURB WORK | L.F. | \$ | 13 |
| JB 803.1 | LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH RDWY REMOVAL (LINE CUT ASPHALT) | L.F. | \$ | 12 |
| 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) | | \$ | 24 |
| 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. | \$ | 34 |

[price list goes here]

END OF JB-PAGES SECTION B (NO FURTHER TEXT ON THIS PAGE)

SECTION C. JOINT BID SPECIAL SPECIFICATIONS

MODIFIED SPECIFICATIONS

The specifications listed below supersede the specifications found in the "Joint-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN (ISSUED: AUGUST $1^{1/2}$, 2005)".

| Specification | Superseded Specifications |
|-----------------|---|
| JB-225 | JB-225.1A, JB-225.1B, JB-225.2A, JB-225.2B, & JB-225.3A, |
| JB-300 | JB-300.1, & JB-300.2 |
| JB-351T | JB-351T |
| JB-401 | JB-401 |
| JB-402T | JB-402T.1, JB-402T.1A, JB-402T.2, JB-402T.2A, JB-402T.R1A, JB-402T.R2A, JB-402T.V1 JB-402T.V1A, JB-402T.V2, JB-402T.V2A, JB-402T.J1, JB-402T.J1A, JB-402T.J2, JB-402T.J2A |
| JB-402T.3 | JB-402T.1, JB-402T.2 |
| JB-403T | JB-403T |
| JB-405 | JB-405.1, & JB-405.2 |
| JB -4 50 | JB-450 |
| JB-603T | JB-603T.1, JB-603T.2, JB-603T.3, JB-603T.4, JB-603T.5, JB-603T.6, JB-603T.7, JB-603T.8, JB-603T.9 |
| JB-636E | JB-636EEA, JB-636EB, JB-636EC, JB-636-ED, JB 636EE, JB 636EG, JB-636EH, & JB 636EI |
| JB-636 M | JB-636MA, JB-636MB, JB-636MC, JB-636MD, JB636ME, JB-636MH, JB-636 MI, JB-636 SMB, & JB-636 SMC |
| JB-638NT | JB-638NT |
| JB-638RT | JB-638RT |
| JB-798 | JB-798 |
| JB-799 | JB-799 |
| JB-800 | JB-800 |
| JB-801 | JB-801 |
| JB-802 | JB-802A, JB-802B |
| JB-803 | JB 803.1, JB 803.2, JB 803.3 |

JB 225 - INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES

A. Description

Under this section, the Contractor shall provide all incremental labor, materials, equipment, insurance and incidentals required to support and/or protect the integrity of utility facilities required during the excavation, installation and removal of catch basins within maximum excavation limits shown on sketch JB 225. This shall include but not be limited to the following types of utility facilities:

- 1. Conduits
- 2. Cables
- 3. Concrete encased conduit duct banks
- 4. Steel pipes
- 5. Steam facilities
- 6. Oil-o-static facilities, and
- 7. Non-Cost sharing gas facilities

encroaching the catch basin excavation and sheeting lines as described further in this section and attached sketch JB 225.

B. Materials

Furnish slurry fill or backfill as required. All materials used to support and protect utility facilities shall be as indicated on standard Sketches JB 100A, JB 100B, JB 100C, JB 100C-1, JB 100D, JB 100E and JB 100F, contained elsewhere in these specifications, shall be supplied by the Contractor and approved by the facility operator(s).

C. Methods of Construction

The Contractor shall use sheeting methods that permit maintenance, support and protection of all utility facilities covered by this section. It is the intent of this item to support, maintain and protect any and all combinations and configurations of utility facilities located within limits indicated on sketch JB 225. For the construction of Type III catch basins, the spillway shall be constructed in a separate stage where the excavation limits may be waived after the basin structure has been installed and backfilled. Excavation for the spillway shall not exceed 3' beyond the exterior finished surface of the proposed spillway. Excavation method for spillway construction shall be done by hand. Utility facilities located within the catch basin footprint, are not covered by this section and shall be removed or adjusted by the Contractor under other JB items or by facility operator at their own expense. This section shall then cover the adjusted facilities.

Utility facilities located beyond the established maximum payment limits are not affected by work specified and shall not be disturbed during any type of catch basin installation and/or removal. Contractor shall be solely and totally responsible for support, maintain and protect, any disturbances and/or any damages to such facilities at his expense. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick

and shovel and/or hand held power tools) directly below the pavement base to expose the facilities and to ascertain the spatial relationships and/or dimensions of these utilities with respect to the proposed excavation. Upon exposing the affected utilities as determined solely by the facility operator(s), the Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, within a zone of protection whose limit shall be defined as a perimeter located one foot from the outside face of each utility interference.

D. Method of Measurement

The quantity to be measured for payment shall be each basin where utility facilities are located within the limits indicated on sketch JB 225. Utility facilities located within the catch basin footprint shall be removed or adjusted by the contractor under other JB items. This section shall then cover the adjusted facilities. Payment will be made only one time at locations where a new catch basin is to be installed at the same location as a preexisting catch basin as specified on contract drawings. For the purpose of this item, "same location" shall mean within 10ft of the preexisting basin location.

- JB 225.1A Installation and removal of catch basins with utility interferences (EA)
- JB 225.1B Installation and removal of catch basin with utility interference at an additional depth of up to 3 feet (EA)
- JB 225.2A Installation of catch basins with utility interferences (EA)
- JB 225.2B Installation of catch basins with utility interferences at an additional depth of up to 3 feet (EA)
- JB 225.3A Removal of catch basins with utility interferences. This item shall be applied only in situations where the catch basin is being removed and not replaced. This item requires complete removal of the catch basin including the floor. (EA)

E. Price to Cover

For JB items 225.1A & 225.2A - The price shall cover the cost of all labor, material, equipment, insurance and incidentals necessary to completely support and protect and maintain the integrity of the utilities without disruption of service to the customers and in accordance with other types of utility items. The price shall also include the cost of: supports, slings and beams installed for utility support; changes of sheeting method and configuration where necessary to accommodate the utility; a combination of hand and machine excavation within the payment limits specified; the disposal of excess backfill material; the placing of backfill material adjacent to catch basins within the maximum payment limits shown on sketch JB 225; backfilling and compacting around over, under and in between utility facilities; installation and removal of sheeting around facilities; support and protection of utility facilities encountered during construction of the spillway. The price shall also cover any additional excavations including hand and hand and machine excavations under and in between single and multiple facilities; and/or in between utility facilities and other existing structures. The unit price shall be deemed to cover all incremental cost for all labor, material, equipment, and incidentals necessary to excavate, install and/or remove specified catch basins while completely supporting, protecting, maintaining and/or adjusting the catch basin to accommodate the integrity of the encroaching utility facilities without disruption of service to the customers in accordance with the contract documents. All cost to support maintain, protect, and accommodate the integrity of utility facilities shall be deemed included in the price for this item. The price shall also cover all additional restricted excavating, sheeting, backfilling, and

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compaction around, over, under, and between utility facilities and all other existing structures and/or newly installed and/or removed catch basin.

<u>For JB items 225.1B and .2B</u> – The price to cover shall include all work as described in price to cover for JB 225.1A and .2A plus installation of the catch basin at an additional depth of up to three feet. 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. Payment will be made only one time if the Contractor elects to install new basins next to existing basins to accommodate their operations. No payment will be made for the removal of the existing basins if performed at a later sequence.

<u>For JB items 225.1A, .1B, .2A, and .2B</u> - if tight sheeting is not utilized for the installation of the catch basin this JB pay item shall be reduced by 60%.

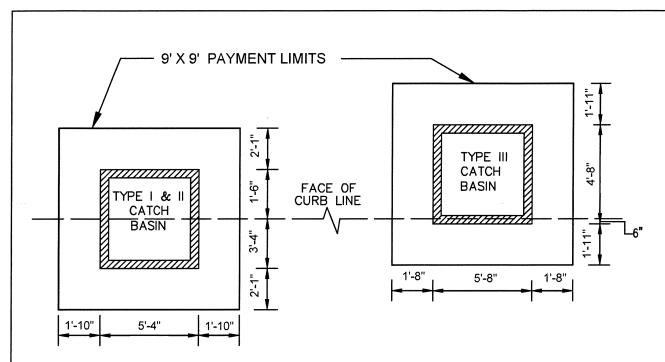
<u>For JB item 225.3A</u> – The price to cover shall include all work as described in price to cover for JB 225.1A and .2A plus the modification of means and methods for the removal of catch basins using hand tools including but not limited to chipping guns and jack hammers when work is performed in the presence of utility facilities within the excavation limits as outlined in sketch JB 225.

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. Payment will be made only one time if the Contractor elects to install new basins next to existing basins to accommodate their operations. No payment will be made for the removal of the existing basins if performed at a later sequence.

F. References

- Sketches JB 225, JB 100A, JB 100B, JB 100C, JB 100C-1, JB 100D, JB 100E and JB 100F
- 2. NYS Industrial Code Rule 753

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CATCH BASIN ORIENTATION TO CURB LINE WITH PAYMENT LIMITS CONCENTRIC TO BASINS N.T.S.

JB 225 PAY LIMITS

| CATCH BASIN
TYPE | DIMENSION TO UTILITY FACILITY PARALLEL FROM FACE OF CURB INTO STREET | DIMENSION TO UTILITY FACILITY PARALLEL FROM FACE OF CURB INTO SIDEWALK | DIMENSION TO UTILITY FACILITY PERPENDICULAR TO CURB FROM FACE OF CATCH BASIN |
|----------------------|--|--|--|
| TYPE I & II TYPE III | 3'-6" TO 5'-5" | 1'-8" TO 3'-7" | 0'-2" TO 1'-10" |
| | 0'-8" TO 2'-5" | 4'-10" TO 6'-7" | 0'-2" TO 1'-8" |

NOTES:

FOR EXCAVATIONS GREATER THAN 9'X9', THE CONTRACTOR SHALL SUPPORT ALL UTILITIES AS SPECIFIED UNDER THE VARIOUS ITEMS WITH NO ADDITIONAL COMPENSATION FROM THE IMPACTED UTILITIES. PAYMENT UNDER THIS ITEM SHALL INCLUDE MODIFICATION OF SHEETING METHODS TO SUPPORT UTILITY FACILITIES PARTIALLY WITHIN THE PAYMENT LIMITS SPECIFIED.

ACCOMODATION OF UTILITY FACILITIES DURING CATCH BASIN INSTALLATIONS

LAST REVISION SKETCH NO. JB 225

JB 300 - SPECIAL CARE EXCAVATION AND BACKFILLING

A. <u>Description</u>

Under this section, the Contractor shall provide all incremental labor, materials, equipment, insurance and incidentals required for trench excavation when protecting and maintaining and accommodating the integrity of utility facilities, including but not limited to:

- 1. Conduits
- 2. Cables
- 3. Structures
- 4. Concrete encased conduit ductbanks
- 5. Steel pipes
- 6. Steam facilities
- Non-cost sharing gas facilities

of various sizes and configurations, encroaching (partially exposed) or paralleling (not exposed) within 6 inches of the approved city trench lines for all phases of contract excavation as shown on contract drawings and/or as encountered during construction, except excavations to the ultimate depth for curbs, sidewalks and roadway/base/sub-base removal which are covered under other JB items. This item shall also apply to facilities that cross excavations for water service installation and extensions or excavations for water tap searches. The items specified under this section shall not be measured for payment in conjunction with any other types of utility items. All work shall be performed in accordance with contract plans, specifications, sketches JB 300A and JB 300B and at the direction of the facility operator(s).

B. Materials - N/A

C. Method of Construction

The Contractor shall maintain and protect and accommodate the integrity of all utility facilities encroaching/paralleling within excavations as schematically shown on sketches JB 300A and JB 300B. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (i.e. pick and shovel or hand held power tools) directly below the pavement base to expose the facilities and ascertain the spatial relationships and/or dimensions of these utilities with respect to the proposed excavation. Upon exposing the affected utilities sufficiently as determined solely by the facility operator(s), the Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, within a zone of protection whose limit shall be defined as a perimeter located one foot from the outside face of each utility encroaching.

D._Method of Measurement

The unit price for this work item shall be based on the volume (C.Y.) of special care excavation calculated as follows:

 For paralleling facilities (not exposed) within six inches of city trench line: The area for payment shall be measured horizontally from the face of the excavation plus one foot towards the center

- of trench and vertically from bottom of the roadway to the bottom of the trench, multiplied by the length of the paralleling utility facility as indicated in sketches JB 300A and JB 300B.
- For encroaching facilities: The area for payment shall be measured horizontally as the width of the encroaching facility plus one foot towards the center of the trench and vertically from the bottom of the roadway to the bottom of the trench, multiplied by the length of the encroaching utility facility as indicated in sketches JB 300A and JB 300B.
- For facilities crossing water service excavations: Depth as defined above multiplied by the width taken as the outside diameter width of structure plus one foot on either side, multiplied by the length of the exposed facility inside the trench.

The volume calculation shall in all cases include, the volume occupied by the utility proper within the payment area described above. Overlapping volume dimensions measured as described above may occur when multiple utilities are encroaching trench excavations. In such cases, all such utilities shall be counted as one utility limited by the maximum encroachment of pipes, conduit(s), and conduit banks faces. The volume shall then be calculated as described above and shown on sketches JB 100E, JB 300A and JB 300B. Utilities identified as abandoned by the facility operator prior to be beginning of excavation, are not included for payment under this item.

- JB 300.1 Special care excavation and backfilling for utility facilities in city trenches less than 5' in depth
- JB 300.2 Special care excavation and backfilling for utility facilities in city trenches 5' or greater in depth

E. Price to Cover

The price shall cover the cost of all labor, material, equipment, insurance and incidentals necessary to completely protect and maintain and accommodate the integrity of the facilities without disruption of service to the customers and in accordance with contract documents. The price shall also include the cost of modifications to typical work methods, including water tap search excavations and the use of such methods as hand excavation around existing single and multiple facilities; backfilling and compaction around, over and under the utilities including the use of special methods, installation and removal of sheeting from around the facilities, and traffic plates that may be required to temporarily close and/or complete the work.

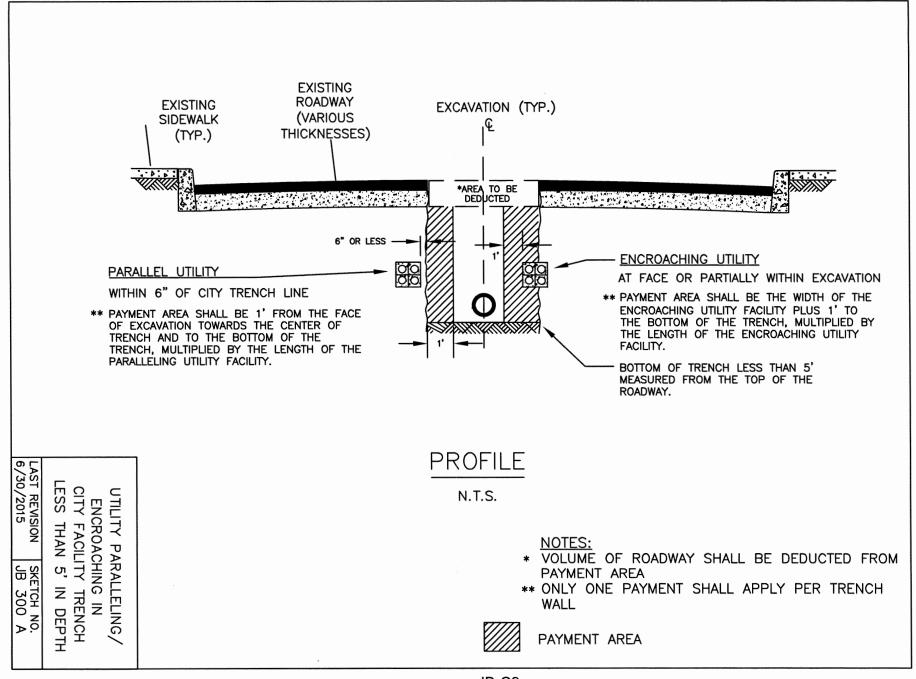
For item JB 300.1 – Depth shall be measured from the bottom of the existing roadway to the bottom of the trench up to a total trench depth of less than 5' measured from top of roadway.

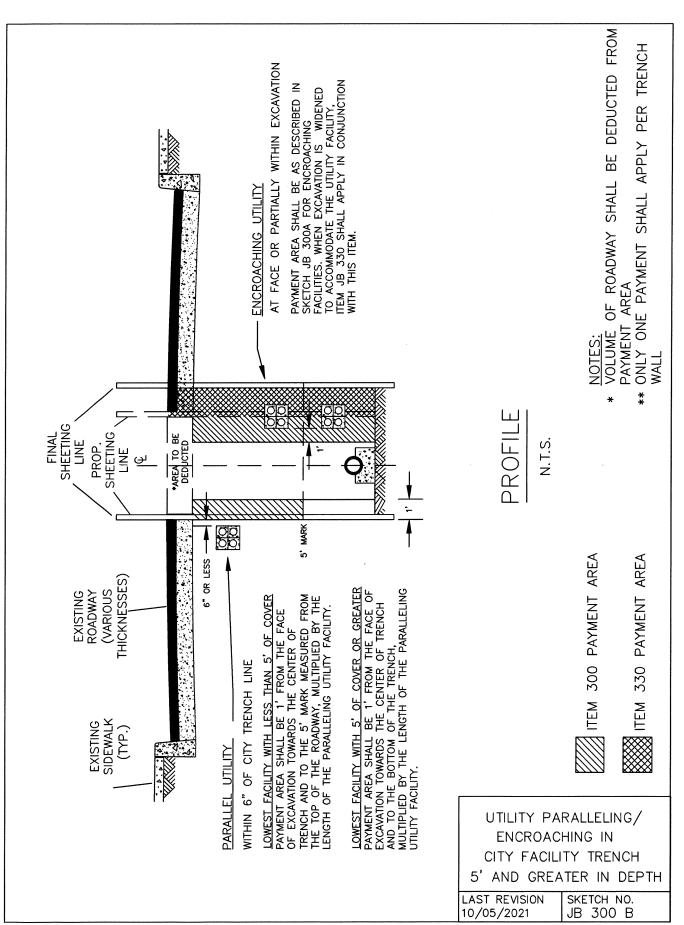
For item JB 300.2 – Depth shall be measured from the bottom of the existing roadway to the bottom of the trench.

If the lowest utility facility is located at a depth less than 5' in a trench greater than 5' deep, then only item 300.1 shall apply. Only one payment for either 300.1 or 300.2 shall apply per trench wall.

F. References

- 1. Sketches JB 100E, 300A, JB 300B
- 2. NYS Industrial Code Rule 753





JB 351T - UTILITY POLE SUPPORTS

A. Description

This section describes the temporary supports for utility poles at locations directed by the facility operator(s) in consultation with the Resident Engineer, in order to maintain such poles in their existing upright position without disturbing attached wires and equipment. The Contractor shall provide all labor, material, equipment, insurance, and incidentals required to construct, install and maintain an effective support system that will meet the stated objective.

B. Materials

All materials required to construct and maintain an effective support system shall be supplied by the contractor and approved by the facility operator.

C. Method of Construction

Where directed by the utility representative, the Contractor shall furnish, install and remove utility pole supports and maintain utility poles as shown on Sketch JB 351. Alternate methods proposed by the Contractor will be permitted if approved by the facility operator.

D. Method of Measurement

The quantity of utility pole supports to be measured for payment shall be the number of utility poles supported. The Contractor will be paid only once for each utility pole supported and maintained no matter how many different construction operations have an impact on the pole.

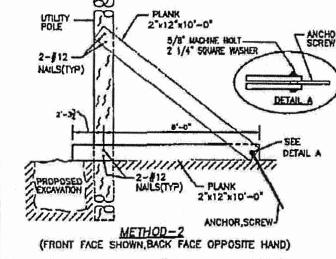
E. Price to Cover

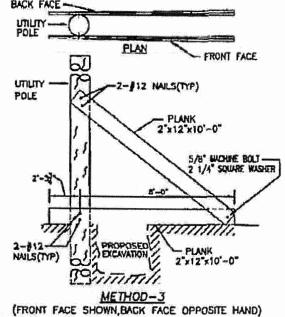
The price shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish, install, maintain and remove utility pole supports to completely support, maintain, protect, and accommodate the integrity of utility poles without disruption of service to customers. The price bid shall also include all additional impact cost associated with working around utility pole supports, poles and appurtenances.

F. References

1. Sketch JB 351T

METHODS OF SHORING UTILITY POLES BILL OF MATERIAL: 1. 5/8" THRU BOLT, NUTS AND WASHERS 2. LUMBER 2" x 8" 3. BLOCK TO SIZE (NAIL TO 2"x8" WITH \$12 NAILS) 4. NAIL TO POLE WITH COMMON \$60 UTILITY POLE 0 BACK FACE FRONT FACE STACK WITH METHOD-1 BACK FACE . BACK FACE SEE DETAIL A POLE PLAN PLAN FRONT FACE FRONT FACE 6 - PLANK 2"x12"x10"--0" POLE צועוזט 2-112 NAILS(TYP) ANCHOR SCREW POLE 5/8" MACHINE HOLT _____ 2 1/4" SQUARE WASHER PLANK 2-112 2"x12"x10"-0" HALS(TYP) 5/6" WOHE BOLT-DETAIL SEE DETAIL A





NOTES:

- 1. THESE METHODS OF SHORING ARE GENERAL GUIDES. FIELD CONDITIONS WILL DICTATE WHICH METHOD WILL BE USED, VARIATIONS OF THESE METHODS WHICH ACCOMPLISH THE SAME PURPOSE MAY ALSO BE UTILIZED WHEN APPROVED BY OVERHEAD CONSTRUCTION DEPARTMENT.
- 2. ANY INFORMATION NOT SHOWN WILL BE DETERMINED IN THE FIELD TO SUIT THE FIELD CONDITIONS WHEN APPROVED BY THE OVERHEAD CONSTRUCTION DEPARTMENT.

JB SKETCH METHODS OF SHORING UTILITY POLES

JB 351T

REVISIONS 3/7/18

CONTRACT NO. SKETCH NO.

JB 401 - TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to excavate by hand to locate and expose subsurface utilities encountered during construction in preparation for horizontal and vertical movement (covered by other Sections), and to support and maintain and protect the integrity of utility facilities including but not limited to:

- 1. Conduits;
- Conductor(s) and/or cable(s);
- 3. Concrete Encased Conduit Bank(s);
- 4. Steel Pipe(s)

The trench to be excavated shall be determined by the size of the utility and the extent of adjustment required to avoid interferences as detailed on Sketch JB 402 A during all phases of contract work. The work shall be performed in accordance with the specifications, and at the directions of the facility operator in consultation with the Resident Engineer.

B. Materials

All materials used to support and maintain and protect shall be similar to those indicated on Sketches JB 100 A and 100 A-1 and shall be supplied by Contractor and be approved by the facility operator in consultation with the Resident Engineer.

C. Methods of Construction

The Contractor shall cut, break and remove various thickness of surface and base pavement, excavate by hand to expose, support and protect all utility facilities within the trench and then furnish and tamp backfill after work has been completed by the parties indicated under other Sections. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility. Upon exposing the affected utilities sufficiently to determine relationships and/or clearances at the sole discretion of the facility operator in consultation with the Resident Engineer, the Contractor shall be permitted to proceed with a combination of hand and machine excavation sufficiently to wingback all interferences of cable and conduit. The trench shall be adjusted so as to provide a nominal cover of 24" over the highest conduit. The width of the trench shall be as directed by the facility operator in consultation with the Resident 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 trench bottom shall be removed, and the voids backfilled before conduits are placed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench.

D. Method of Measurement

The Contractor shall be paid per cubic yard (C.Y.) of trench actually excavated to the limits directed as detailed in Sketch JB 402 A and to the satisfaction of the facility operator in consultation with the Resident Engineer. When two or more utility facilities requiring horizontal or vertical adjustment with different owners are in the same trench, the facility operators shall jointly determine the percentage of ownership of the trench.

E. Price to Cover

The price for excavation shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to completely expose, support and protect and maintain the integrity of the facilities without disruption of service to the customers and in accordance with the Contract Documents, associated maintenance of traffic, and traffic plates and sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand to expose existing structures, furnish, place and tamp backfill after required vertical and/or horizontal adjustments have been completed under other Sections. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be paid under other items. The price shall also include the cost of locating and supporting and protecting all utilities encountered including slings and beams installed for utility support when required. The price shall include maintaining the sheeting for the duration of the relocation and work required by the facility operator including but not limited to pipe-ripping covered under JB 402T.

F. References

- 1.NYS Industrial Code Rule 753
- Sketch JB 100 A and A-1
- 3. Sketch JB 402 A

JB 402T - HORIZONTAL AND VERTICAL ADJUSTMENT OF TELECOMMUNICATIONS FACILITIES

A. <u>Description</u>

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to adjust and support and protect and maintain and accommodate the integrity of telecommunication facilities including but not limited to:

- Conduit(s);
- 2. Cables and Air Pipe
- 3. Concrete Encased/Capped Conduit Banks

The work shall be performed in accordance with specifications and at the direction of the facility operator in consultation with the Resident Engineer.

B. Materials

All materials used to adjust and support and protect and maintain and accommodate the integrity of utility facilities shall be similar to those indicated on the standard Sketches JB 100 A & 100 A-1 and shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

Materials used for replacing conduit(s) removed under this item shall be supplied by and installed by the Contractor and shall include but not be limited to the following:

- 1. Bends
- 2. Split and Solid Conduit(s) PVC and Steel
- 3. Couplings and Adapters PVC, Tile and Steel
- 4. Straps or plastic ties

PVC conduit and fittings shall be as supplied by American Pipe and Plastics, Type "C" or approved equal.

Steel Pipe and fittings shall conform to ASTM A53 Schedule 40

Tile to PVC adaptors shall be as supplied American U-Tel or approved equal.

C. Methods of Construction

Lengths of "wing-back" shall be determined by the facility operator in consultation with the Resident Engineer. All work performed prior to that approval shall be at the contractors risk.

Methods of construction shall include but not be limited to the following:

1 Removal and Support

a. Break with hand held power tools, remove and dispose of plain or reinforced concrete encasement.

- b. Break with hand held power tools, remove and dispose of conduit(s) enclosures and conduit that contain conductor(s) and/or cable(s) except steel/Iron conduits, inner ducts and 1 ½" to 1 ½" PVC "quad ducts. Breaking "ringing and ripping" of steel/iron conduits belonging to ECS shall be performed by ECS forces only. Contractor shall make safe the work area to accommodate the ECS forces.
- c. Support and protect exposed conduits, cables, innerduct and airpipe as shown in Sketch JB 100A-1 and approved by the facility operator in consultation with the Resident Engineer.
- d. ECS tenants cables may require inspection, testing and encapsulation before they can be shifted. Contractor shall make safe the work area to accommodate these forces. Contractor shall be notified by the facility operator of the ECS tenant requirements before the conduits are broken-out.

2 Adjust or Move Conductor(s) and/or cable(s) and support

- a. Cable shall be relocated horizontally and/or vertically as directed by the facility operator in consultation with the Resident Engineer
- b. Support and protect conductors and/or cables as shown on Sketch # JB 100 A-1 and/or as directed by the facility operator.

3. Replacement, Encasement, Protection and Support

- a. Replace vacant and loaded conduit(s) with solid and/or split conduit(s) and adapters.
 - 1) <u>Vacant Conduit</u> Repairs to conduits shall not be permitted. All damaged or impaired lengths of conduit(s) shall be removed and replaced with new conduit(s). The number of vacant conduits replaced shall be confirmed by the facility operator.
 - 2) <u>Loaded Conduit</u> Replacement of conduits that are removed from around existing cable(s) or innerduct shall be accomplished with split plastic (PVC) or split steel conduits as directed by the facility operator. Where split and solid plastic or steel conduit is used, the conduit(s) shall be spaced 1½ inches from each other. All split PVC shall be secured with plastic straps spaced at a maximum distance of eighteen (18") inches. Plastic conduit shall be joined with plastic couplings.
 - 3) <u>Adapting</u> Joining plastic conduit to existing conduits of other diameters or material shall be done using single or multiple adapters, (supplied by contractor).
- b. If due to subsurface conditions, the cover is less than 20" from finished grade, the duct shall be protected with steel plates furnished by the contractor and measured for payment under Item JB 403T.
- c. Support and protect cable(s) and/or conductor(s) and conduit(s).
- d. Verify vacant conduits and provide pull ropes.

e. Encase all exposed conduit with concrete (fc = 1200 to 1500 psi maximum) with slump commensurate to completely fill voids around conduits. Concrete encasement shall extend to two (2") inches beyond the limits of the duct bank vertically and horizontally.

D. <u>Method of Measurement</u>

The quantity to be measured for breaking out conduits, removing concrete, moving, protecting and supporting conductors and replacing conduits with split and solid conduit, shall be paid for by the linear foot (L.F.) of each conduit replaced. A linear foot of conduit shall be defined as one (1) single conduit measured along its longitudinal axis that has been broken out or moved from its original location either horizontally and/or vertically and measured in its final location. Quad PVC ducts produced as one unit shall be consider one duct for each quad unit. All conduits removed under this section and not restored shall be paid at 60% of the appropriate item in this section.

Multiple tile duct bank with concrete protection cover is not considered concrete encasement.

Each type of utility adjustment shall be paid for separately, the types of utility adjustments are defined as follows:

- JB-402T.1 Existing Concrete Encased Non-Steel/Iron Conduits Placed in Final Position without Concrete Encasement. (L.F.)
- JB-402T.1A Existing Concrete Encased Non-Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)
- JB-402T.2 Existing Non-Concrete Encased Non-Steel/Iron Conduits Placed in Final Position without Concrete Encasement. (L.F.)
- JB-402T.2A Existing Non-Concrete Encased Non-Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)
- JB-402T.R1A Existing Concrete Encased Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)
- JB-402T.R2A Existing Non-Concrete Encased Steel/Iron Conduits Placed in Final Position with Concrete Encasement. (L.F.)
- JB-402T.V1 Existing Vacant Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.)
- JB-402T.V1A Existing Vacant Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.)
- JB-402T.V2 Existing Vacant Non-Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.)
- JB-402T.V2A Existing Vacant Non-Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.)

JB-402T.J1 Existing Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

JB-402T.J1A Existing Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

JB-402T.J2 Existing Non-Concrete Encased Conduits Placed in Final Position without Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

JB-402T.J2A Existing Non-Concrete Encased Conduits Placed in Final Position with Concrete Encasement. (L.F.) in Which Only Conduit Joints are Broken Out and Conduits Remain Intact.

E. Price to Cover

The unit price bid per linear foot (L.F.) of conduit shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to shift, adjust, support, protect, maintain and accommodate the integrity of utilities without disruption of service to the facility operator's customers and in accordance with contract documents. The price bid shall also include the cost of: breaking out, removal and disposal of plain or reinforced concrete encasements, conduits (except iron/steel), support of cables/conduits, replacement with field split, split and solid conduits, adapters, clamps, straps and couplings; verify vacant conduits and provide pull ropes; furnish and install concrete encasement, supports, slings and beams for utility support; changes of sheeting method and/or configuration when required and where necessary to accommodate the utilities during all phases of contract work; and removal of sheeting around the utilities, and all else necessary and required to complete the work.

The unit price shall include providing access to the facility operator pipe-ripping crews and tenants to verify and test cables before, during and after the pipe ripping operation completed by the facility operator or specialized contractor hired by the facility operator and after conduit removal by the Contractor The unit price shall include, but not limited to, opening and closing of fences; removal and replacement of temporary timber curb and opening and closing of traffic plates. Access to adjacent manholes impacted by the run is included in this item. JB 450 shall not be used in conjunction with JB-402T as JB-402T covers access to the work site at all times for work required under this item.

F. References

- 1. Sketches JB 100A and 100A-1
- JB 403T
- American Pipe and Plastics, P.O. Box 577, Binghamton, N.Y. 13902
- 4. American U-Tel, 9760 Smith Rd., Willoughby, Ohio 44094

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

A. <u>Description</u>

Under this item the contractor shall provide all labor, equipment, transportation, insurance and incidentals to remove and dispose of asbestos containing material - transite pipe (ACM-TP).

The contractor shall strictly adhere to all environmental requirements and work practices and notifications specified under construction details.

The transite conduits (ACM-TP) to be removed contain active cables and these cables will remain active during the transite conduits removal.

All removal and disposal of ACM-TP shall be done by pre-qualified contractors (or sub-contractors) as specified under method of construction.

B. Materials

The contractor shall supply separate dumpsters to be used exclusively for the removal and disposal of the ACM-TP and all other materials such as bagging, dumpster linings, respirators and filters, enclosures and all other incidental material required for the removal and disposal of the Verizon/ECS ACM-TP in accordance with laws, rules and regulations of Federal, State or local agencies.

C. <u>Method of Construction</u>

a. Work Scope

Removal of concrete encased conduits shall be accomplished by hand held chipping hammers. The removal should be in a pre-identified operation in order to minimize the potential release of airborne asbestos fibers from the ACM-TP.

b. Notification And Variance

Verizon/ECS is required by the New York City Department of Environmental Protection (NYCDEP) to obtain a site specific variance.

The contractor shall prepare the variance application letter and the NYCDEP Form ACP-9 and will submit them to the NYCDEP not sooner than four (4) weeks prior to the start of the ACM-TP removal.

The contractor is responsible for preparing the NYCDEP Form ACP-7 together with NYCDEP Form ACP-9 as the applicant and providing these forms to Verizon/ECS for review and signature prior to submittal to the NYCDEP seven

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(7) weeks prior to the commencement of the project (Notice to begin construction).

The contractor shall prepare the New York State Department of Labor (NYSDOL) notification Form DOSH-483 prior to submittal to the NYSDOL at lease four (4) weeks prior to the commencement of the project.

The contractor shall prepare the United States Environmental Protection agency (USEPA) Notification of Demolition and Renovation form for submittal four (4) weeks prior to the commencement of the project.

c. Vendor Prequalification

All subcontracted environmental parties which shall include but not be limited to asbestos abatement contractor, project monitoring firm, air sampling and analytical contractor can be selected from Verizon's currently approved vendor lists. Should the contractor elect to use his own list, that information shall be provided to Verizon/ECS for review/ approval at least four (4) weeks prior to date the ACP-7 form is submitted to Verizon.

d. Waste Transport and Disposal

The ACM-TP that is removed will be disposed of as ACM waste at an asbestos landfill. This landfill site shall be selected from one of Verizon's list of approved disposal sites. The contractor will identify and obtain approval from Verizon for the transporter. The contractor can select one of the Verizon's currently approved transporters, or alternatively select a transporter of its own. Should the contractor elect to use latter, that information shall be provided to Verizon/ECS for review/approval at least 4 weeks prior to the date the ACP-7 is submitted to Verizon.

An original of the asbestos waste manifest is to be provided to the Verizon/ECS representative for all shipments that leave the work site. A signed copy (by the selected landfill) of the waste manifest is to be provided to Verizon/ECS not later than 10 days from the date the shipment leaves the site.

e. Exhibits

The forms are a component part of this item.

1-NYCDEP Form ACP-7 2-NYCDEP Form ACP-9R1 3-NYSDOL Form DOSH-483 4-USEPA - Notification Form

f. Work Plan

- 1. For this item the contractor must submit to Verizon/ECS for review and approval a detailed site specific work plan.
- The contractor must submit to Verizon/ECS for review and approval any alternate proposals for variance requested from Regulatory Statutes (NYSDOL & NYCDEP).

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- 3. The contractor shall provide all sampling and laboratory analysis required under the Industrial Code Rule 56 Subpart 17 and all applicable Blanket Variances. All sampling and analysis shall be performed by a firm independent from the Contractor. The price for the cost for compliance air monitoring sampling and analysis shall be included in the price bid for listed items.
- 4. Within five (5) calendar days of the receipt of the results of any part of the compliance air sampling and analysis, the Contractor shall forward a copy of those results (showing the name and address of the laboratory, the type of test performed, the method of measurement and all information normally relevant to sampling and analysis of asbestos remediation procedure) to Verizon/ECS onsite representative.

g. Project Folder

Upon completion of the abatement, the Contractor shall provide a complete job folder with the following documents, which shall include chain of custody records:

- a. Copy of Supervisor/Handler certifications
- b. Copy of the Subcontractor's Enclosure Entry Permit
- c. Result of Analysis for All Bulk Samples, Air and Clearance Monitoring
- d. Copy of all Notifications (City, State, Federal)
- e. Copy of the Vendor's Certificate of Insurance
- f. Copy of the Waste Transporter Permit
- g. Signed Asbestos Waste

D. Method of Measurement

Payment under this item shall be paid for by the linear foot (L.F.) of each conduit removed. A linear foot of conduit shall be defined as one (1) single conduit up to and including 4" nominal diameter measured along its longitudinal axis that has been broken out and removed.

E. Price to Cover

The unit price per linear foot (L.F.) shall cover the actual costs of all supervision, labor, insurance, (including asbestos liability insurance), materials and equipment necessary to complete the work. The Contractor shall cover the cost of preparing variance application, all filing fees and will submit the application with associated fees to the NYCDEP for processing.

Any contractor's alternative proposals for variance requested from regulatory statutes (NYSDOL & NYCDEP) shall be also included in the actual cost.

Excavation and backfill shall be paid for under JB 401.

F. References

N/A

JB 403T - FURNISH AND INSTALL STEEL PROTECTION PLATES FOR TELECOMMUNICATIONS FACILITIES

A. Description

Under this section, the Contractor shall furnish and install as required permanent steel protection plates over telecommunications facilities where directed by the facility operator(s).

B. Materials

Material shall be:

1/4" thick ASTM A-36 plates. Maximum size 24" by 48".

3/8" thick ASTM A-36 plates. Maximum size 12" by 18".

Thickness to be determined by the facility operator(s)

C. Method of Construction

Steel protection plates shall be placed in accordance with the attached facility operator(s) standard sketch JB 403T. All protective plates shall overlap a minimum of 3".

D. Method of Measurement

The quantity for payment shall be the area of permanent steel plating protection furnished and installed (excluding overlap) and measured in place in Square Feet (S.F.).

JB 403T.1 – Furnish and Install 1/4" thick steel plate (S.F.)

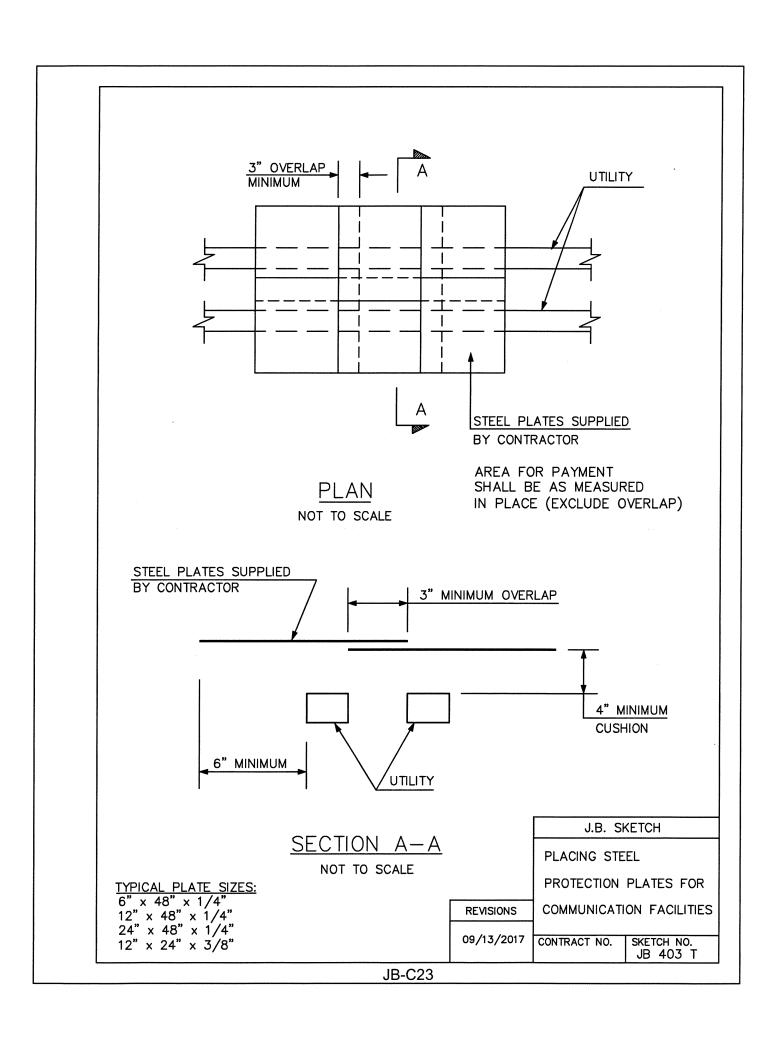
JB 403T.2 – Furnish and Install 3/8" thick steel plate (S.F.)

E. Price to Cover

The price shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to complete the work.

F. References

Sketch JB 403T



JB 405 - EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals necessary to excavate, maintain trenches and backfill for the installation of new utility facilities including but not limited to:

- 1. Conduits
- 2. Non-cost sharing gas facilities
- 3. Steam mains
- 4. Steel pipe(s)

The trench to be excavated shall be determined by the size of the utility facility to be installed. The work shall be performed in accordance with applicable specifications, at the direction of the facility operator.

B. Materials

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator.

C. Methods of Construction

Excavation - The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant and as directed by the facility operator. The trench shall be adjusted so as to provide a nominal cover as defined in the specifications for the facility being installed over the new utility facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator. The width of the trench shall be as directed by the facility operator or as shown on Sketch JB 603T (ECS only). The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of backfill material or in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new utility facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new utility facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new utility facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator.

Care shall be taken that no existing utility facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new utility facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

- 2. Maintenance of Trench Excavation Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator to facilitate the installation of the new utility facility. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator. Upon completion of installation of the new utility facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.
- 3. <u>Pavement and Sidewalk Restoration</u> After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract.

D. Method of Measurement

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated and backfilled as directed by the facility operator or as shown on Sketch JB 603T for JB 603T Items. The volume occupied by existing pipes or other structures will not be deducted from the total volume measured.

- JB 405.1 Trench Excavations for installation of Utility Facilities with total depths less than five feet (C.Y.)
- JB 405.2 Trench Excavations for Utility Facilities with total depths equal to or greater than five feet (C.Y.)

E. Price to Cover

The unit price bid for the various trench excavation items shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to completely expose, protect and maintain the integrity of the facilities without disruption of service to the customers and in accordance with the contract documents. The price shall also include, installation of traffic plates as well as opening and closing of plates as may be required in order to provide access to trench; installation, removal and maintenance of tight sheeting as required; cutting, breaking and removing various thickness of surface and base pavement; excavation by hand to expose

existing structures; furnishing, placing and compacting clean backfill following installation of utility facility in compliance with DOT requirements. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be paid under city items. The price shall also include the cost of locating and protecting all utilities encountered as required.

Clean backfill material in accordance with specifications shall be used around gas facilities and critical facilities shall be paid for under item JB 303.

F. References

- 1. Item JB 303
- 2. Sketch JB603T
- 3. Con Edison Specifications, latest revisions

CEHSP S13.00 - Excavation and Trenching

JB 450 - CONSTRUCTION FIELD SUPPORT

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals necessary to provide construction field support, while maintaining and protecting surface and subsurface facilities, at various locations approved solely by the facility operator. The Contractor shall encounter various surface and subsurface utility facilities while performing various construction field support operations, which may include but are not limited to working over, under, adjacent to, around, in between and in close proximity of:

- 1. Conduits
- 2. Conductors
- 3. Concrete encased conduit banks
- 4. Steel pipes
- 5. Gas mains
- 6. Steam mains
- 7. Oil-o-static facilities
- 8. Utility structures and covers

The actual construction field support operation to be performed by the Contractor shall be performed in accordance with the contract plans, specifications or as determined based on actual field conditions and at the sole discretion and direction of the facility operator. This item shall apply to various field support operation tasks for which there are no other applicable JB Items to cover the required work. This item will not apply and will not be paid when there are other applicable JB items available either partly or completely covering tasks described below as determined solely by the facility operator.

B. Materials

All materials used to provide construction field support shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

C. Methods of Construction

It is the intent of this item that the Contractor provides field support construction crews suffice to perform various item type tasks required as described. For the purpose of this item a crew consists of more than one non-management individual. The Contractor shall provide all labor and equipment necessary to perform the required task as described below under existing field conditions at various locations and at the sole discretion and direction of the facility operator in consultation with the Resident Engineer. The Contractor shall perform the necessary construction field support, while maintaining and protecting surface and subsurface facilities. The Contractor shall employ approved methods of operation, including the use of appropriate equipment and tools that will enable him to complete the field support operation work as described in the Item Type description below. Existing facilities that are encountered during the construction field support operation shall be supported and protected similar to those indicated on sketches JB 100A and 100B and in a manner suitable to the facility operator in consultation with the Resident Engineer and are deemed included in this item except as included under JB-402T. The Contractor shall properly dispose of all materials excavated away from site, which may require the use of hand held tools and equipment in order to ensure that the integrity of the underground utility facilities are not jeopardized. Care should be taken to avoid damage to existing utility facilities and

structures, and to adjacent curbs, sidewalks, pavements and their foundations, and to avoid caving or sliding banks within excavations.

D. Method of Measurement

- 1 Quantity The quantity to be measured for payment shall be the number of actual crew hours (CRHRS.) provided by the Contractor for performing the various types of construction field support operation as directed by the facility operator in consultation with the Resident Engineer.
- 2 Type The unit type to be measured for payment shall be based on the actual task performed by the contractor and covered by the applicable Item Type. The tasks described within the Bid Item Type below are provided as a guide only as to the general nature of the various functions included, but these examples in no way limit the use of the item to these functions only. The contractor should use this information in order to approximate the various required crew sizes necessary to perform the work covered by this item in a productive, safe and efficient manner. The actual construction crew size required to perform the field support operation shall be determined solely by the contractor in order to perform the required construction field support operation. It is the responsibility of the contractor to provide appropriate field support crews capable of performing required tasks in a productive, safe and efficient manner. The actual crew performing the operation will not be considered, by the facility operator in consultation with the Resident Engineer, when determining the applicable item type, which shall be only as per the task performed.

Note: Only one measurement type will be used for each defined construction field support area.

- Type .1 = Construction Field Support requiring an average size survey crew that will perform typical field survey functions and provide quality data analysis reports.
- Type .2 = Construction Field Support requiring an average small size crew capable of performing various tasks not requiring the use of a machine or operator, which may include but are not limited to: opening/closing subsurface structure cover(s), setting/resetting MPT setup(s), assisting Utility Facility/Specialty crew(s) not included in JB 402T or JB 450.5, performing conduit occupancy identification, clean-up storage work-site area, etc.
- Type .3 = Construction Field Support requiring an average medium size crew capable of performing various tasks which include the use of a machine and operator, which may include but are not limited to: excavations due to cable failures, including emergency type excavations, construct manhole enclosures, installing support system for utility facilities, dewatering utility structures and excavations, opening/closing traffic and/or pedestrian plates, etc not included in JB 402T or JB 450.5.

- Type .4 = Construction Field Support requiring an average large size crew capable of performing various tasks that requires the use of multiple machine(s) and operator(s), which may include but are not limited to: assistance during heat contingency, welding, repositioning and placing large diameter pipe, etc.
- Type .5 = Construction Field Support requiring an average small size crew when requested by the facility operator to assist the facility operator or speciality contractor hired by the facility operator in shifting and supporting the conduits during pipe-ripping operations and all else necessary as required to complete the work including but not limited to constructing temporary work platform, temporary weather protection

E. Price to Cover

The unit price bid for the various construction field support items shall include the cost of all labor, materials, equipment, insurance, and incidentals necessary to provide construction field support, which may include but is not limited to working over, under, adjacent to, around, in between and in close proximity of surface and subsurface utility facilities and exposing, supporting, protecting and maintaining the integrity of the facilities without disruption of service to the general public, utility customers and in accordance with the Contract Documents at various locations approved by the Facility Operator in consultation with the Resident Engineer. The unit price shall also include openings and closings of plates, and cones, barrels, arrow-boards, etc. and installing, shifting, moving and relocating cones, barrels, arrow-boards, etc. as may be required in order to provide access to excavations and during specialty work being performed by others excluding work operations covered under JB402T. The unit price shall also include excavating by hand to expose existing structures. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price bid. The unit price shall also include the cost of supporting and protecting all utilities encountered during the construction field support operation, as required except work operations covered under JB 402T. The unit price bid shall also include alternate methods for construction field support, which may include changes in equipment and special operations, and sequencing and the use of only all hand-held tools due to existing field conditions. including potential delays and extended performance. Any and all Contractor method changes and operation modifications employed for construction field support are deemed to be included in the price bid for this item. Work under this item may be paid in combination with other City, utility or facility accommodation Items bid under other contract items except where expressedly excluded from that item.

F. References

1. Sketches JB 100A, JB 100B

JB 603T - FURNISH AND INSTALL TELECOMMUNICATIONS CONDUITS

A. <u>Description</u>

Under this Section, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals required to procure and install conduit for the purpose of installing the facility operator's utilities. Conduit runs shall be as shown on the contract drawings or as specified by the facility operator in consultation with the Resident Engineer.

B. Materials

Conduit shall consist of:

PVC - 2" and 4" diameter or 1 $\frac{1}{4}$ " Quad, Type "C" as supplied by American Pipe and Plastics or approved equal

Steel - 4" diameter, ASTM A53, Schedule 40 or approved equal

All conduit including sleeves, couplings, bends, pulling lines, etc. shall be supplied by the Contractor and approved by the facility operator in consultation with the resident Engineer.

The Contractor shall supply all material (Mortar, Brick, etc.) to make repairs to opening(s) as approved by the facility operator in consultation with the Resident Engineer.

C. Method of Construction

The Contractor shall install the specified conduit(s) then rod, mandrel and wire (install pulling line) the new conduits. When conduit pipes are to be connected to existing underground ducts, manholes, or boxes, the Contractor, using hand-held tools only, shall cut existing conduit, to pick-up existing underground conduits with new conduits, make openings into manholes or boxes, install/connect the conduit, and make repairs to seal the openings in the structure.

Steel pipe shall be used for shallow cover and crossing or paralleling steam mains as directed by the facility operator in consultation with the Resident Engineer.

When the facility operator required a combination of conduit types and materials the facility operator will define the configuration of the conduit system and the location of each type within the conduit bank. All conduit shall be spaced 1 $\frac{1}{2}$ " both vertically and horizontally from the adjacent conduit(s). All conduits shall be encased in lean concrete (fc = 1200 to 1500 psi maximum) which shall extend 2" beyond each face of the conduit formation, above and each side of the conduit formation.

If due to subsurface conditions, the cover is less than 20" from finished grade, the duct shall be protected with steel plates furnished by the facility operator(s) and measured for payment under Item JB 403.

The work shall be performed in accordance with the contract plans, specifications, and at the directions of the facility operator in consultation with the Resident Engineer.

D. <u>Methods of Measurement</u>

The quantity to be measured for payment shall be the number of linear feet (LF) of conduit trench for which conduit was furnished and installed:

- 1. 603T.1 Install 1 ea. 2", 4" or 1 1/4" Quad" Conduit (PVC or Steel) in any combination
- 2. 603T.2 Install 2 ea. 2", 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination
- 3. 603T.3 Install 4 ea. 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination
- 4. 603T.4 Install 6 ea. 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination
- 5. 603T.5 Install 8 ea. 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination
- 6. 603T.6 Install 12 ea. 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination
- 7. 603T.7 Install 15 ea. 4" or 1 $\frac{1}{4}$ " Quad Conduits (PVC or Steel) in any combination
- 8. 603T.8 Install 24 ea. 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination 9. 603T.9 Install 30 ea. 4" or 1 1/4" Quad Conduits (PVC or Steel) in any combination

A Quad, consisting of four 1 $\frac{1}{4}$ " conduits shall be supplied as one unit. For purposes of measurement and payment each quad unit of four 1 $\frac{1}{4}$ " ducts shall be counted as one duct.

For any equivalent combination not fitting the above categories payment shall be based on the next higher category.

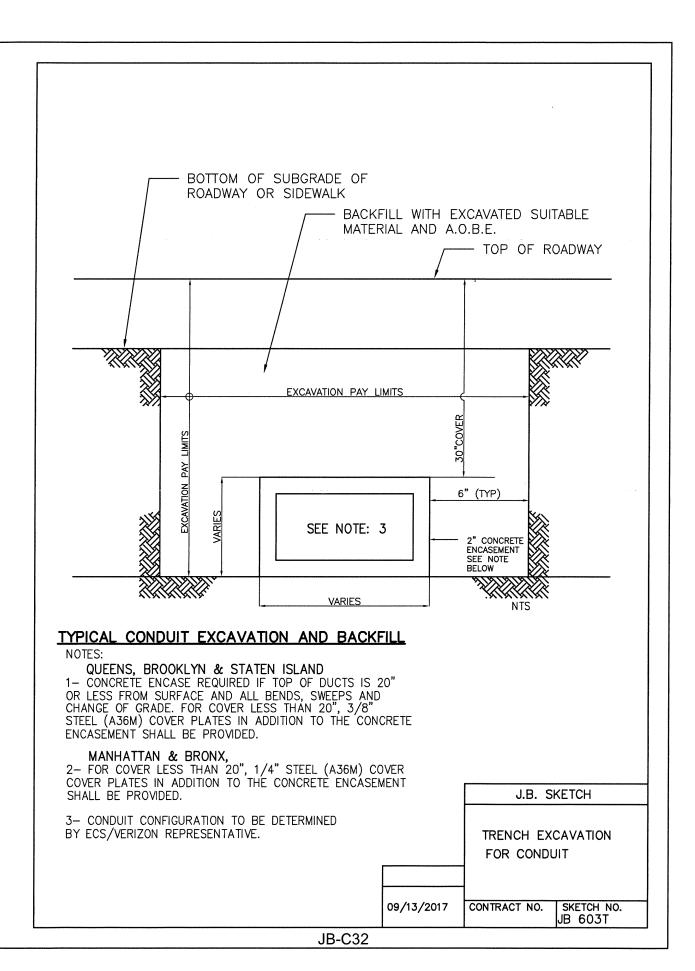
E. Price to Cover

The unit price per linear foot of Conduit trench shall cover the cost of all labor, materials, equipment, insurance and incidentals necessary to furnish, install, rod, rope, and perform any other associated work required to install the conduit completely in place. Where conduits are to be connected to ducts, manholes or boxes, the cost of cutting and/or breaking into the ducts, manholes or boxes, installing and sealing the conduit, including duct plugs; and making repairs to the openings in the structure shall be considered as included in the unit price bid for the installation of the conduit. All acceptance testing, including passing a mandrill with a diameter of 1/8" less than the inside diameter of the duct through the entire length of the duct, as required by the facility operator shall be considered as included in the unit price.

Payment for trench excavation shall be paid under Item JB 405.

Steel protection plates shall be paid for under Item JB 403T

- 1. Sketch JB 603T
- 2. Item JB 405
- 3. American Pipe and Plastics, P.O. Box 577, Binghamton, N.Y. 13902



JB 636E - ADJUSTMENT OF UTILITY HARDWARE

Under this section the Contractor shall adjust existing utility street hardware including vault grates, valve boxes, etc., to the proposed grade by either building up or lowering the installation and resetting the castings, as and where directed by the facility operator.

A. Description

Building up or lowering the installation and resetting the castings shall consist of removing the existing frame and cover, building up or decreasing the existing installation, replacing the frame and/or cover if damaged, as determined by the facility operator, with a new frame and/or cover furnished by the facility operator, and setting the frame and cover to the new elevation.

B. Materials

Materials used shall comply with the Standards and specifications of the facility operator having jurisdiction over the installations. Where high-early strength concrete is required by the Resident Engineer to be placed adjacent to utility installations then the requirement for mortar shall be quick setting mortar capable of obtaining a minimum compressive strength of 1,500 psi in two (2) hours, and the requirement for concrete shall be high-early strength complying with current N.Y. State Department of Transportation, Standard Specifications for Class F concrete.

When castings and/or covers are deemed inadequate at a location as determined by the facility operator, the facility operators shall furnish new castings and/or covers to the Contractor for installation. The Contractor is required to inform the utility operator in advance of the need for the castings. Materials supplied by the facility operator shall be delivered to the contractor's designated storage area.

C. Methods of Construction

The Contractor shall breakout and dispose of sidewalk, curb, pavement and/or pavement base around existing casting, excavate as required to remove casting and install existing or replacement casting, remove casting, protect opening, reinstall existing casting or install new casting to the proposed grades, backfill, grade and compact fill around casting, install base concrete and or sidewalk pavement and curb, tack coat around frame, install and remove temporary pavement around casting where directed by the facility operator; and install and compact asphalt binder and wearing course or other permanent pavement around casting and perform all work in accordance with the contract plans and the specifications.

Setting or resetting the castings shall be done with bricks plus mortar and/or by raising or lowering adjustable castings according to the standards of the utility owner having jurisdiction over the installation. Work shall be done in a workmanlike manner. Any damage resulting from the Contractor's operations to the existing installation which is to remain shall be satisfactorily corrected at the Contractor's own expense, as directed by the facility operator. Castings, which are deemed unacceptable for resetting, shall become the property of the Contractor and shall be removed and disposed of by him away from the site.

No traffic shall be allowed on adjusted utility hardware until permitted by the facility operator.

The quantity to be measured for payment shall be the number of utility hardware units (EA) in each size group actually adjusted as specified under each item. The size of each utility hardware unit, measured in width, shall be defined as either, the diameter of the exposed edge of the casting, or the exposed edge of the longest side of rectangular frames as indicated in sketch JB 636.

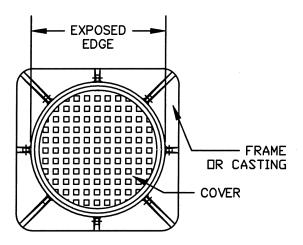
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JB 636 EA - Adjustment of Utility Hardware (Under 7" Width)
JB 636 EB - Adjustment of Utility Hardware (7" to under 14" Width)
JB 636 EC - Adjustment of Utility Hardware (14" to under 30" Width)
JB 636 ED - Adjustment of Utility Hardware (30" to under 34" Width)
JB 636 EE - Adjustment of Utility Hardware (34" to under 41" Width)
JB 636 EG - Adjustment of Utility Hardware (41" to under 75" Width)
JB 636 EH - Adjustment of Utility Hardware (75" to under 125" Width)
JB 636 EI - Adjustment of Utility Hardware (125" to under 170" Width)
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E. Price to Cover

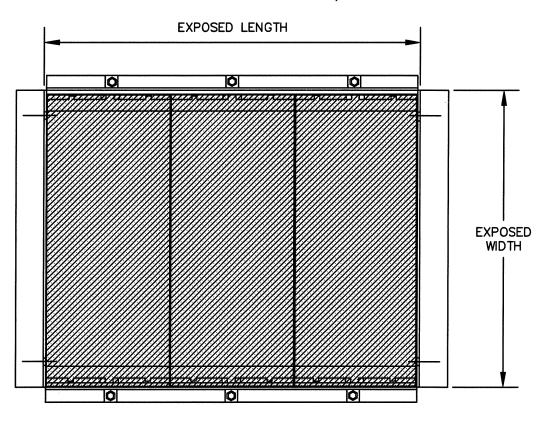
The price for re-grading utility hardware shall be the unit price per each (EA.) and shall cover the cost of furnishing all labor, materials, plant, equipment, and incidentals required to remove existing frames and covers; build up the existing installations with brick and mortar, or lower the existing installations by removing bricks and mortar; replace damaged frames and/or covers with frames and/or covers furnished by others; break out pavement and/or pavement base; protect existing opening and installation; set the frames and covers to new elevations; grade and compact fill; install base concrete; tack coat frame; install, remove, and dispose temporary pavement; install and compact asphalt binder and wearing course or other permanent pavement; repair minor structural damage to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; and complete the work in accordance with the plans, the specifications, and the directions of the facility operator.

- 1. NYS DOT Standard Specs for Class F Concrete
- 2. Con Edison Specifications, latest revisions. EO-10321-B, latest revision Chimneys, collars & grading blocks for manholes & vaults construction and installation
- Sketch JB 636E

ROUND COVERS



RECTANGULAR COVERS/FRAMES



PLAN VIEW N.T.S.

ADJUSTMENT OF UTILITY HARDWARE

LAST REVISION 6/30/2015 SKETCH NO. JB 636E

JB 636 M - MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE DURING PAVEMENT MILLING AND RESURFACING OPERATIONS

A. Description

Under this section, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals required to maintain, protect, and accommodate the integrity of utility hardware during pavement milling and resurfacing operations. Hardware includes castings, frames, and covers on utility structures, valve box cover castings, concrete collars around steam castings, and all other hardware protecting utility facilities.

B. Materials - N/A

C. Method of Construction

Removal of existing pavement around utility hardware shall be performed by the Contractor with extreme caution by utilizing appropriate methods of operation, by employing specialized construction equipment, and by special operations and sequencing.

The Contractor shall not mill existing pavement within 12" of the perimeter of utility hardware. Removal of pavement within 12" of the perimeter of utility hardware shall be by cutting with pavement breakers or other methods as proposed by the Contractor. All methods shall be presented to the facility operator and the Resident Engineer by the Contractor prior to the start of construction and shall be approved by the facility operator in consultation with the Resident Engineer.

During removal of existing pavement and for the duration of project, the Contractor shall protect utility hardware from damage by the Contractor's operations and traffic. Contractor shall also provide all necessary protection to pedestrians to prevent injury to pedestrians when crossing utility hardware during the project. Utility street hardware damaged by the Contractor or others during the project shall be replaced by the Contractor at Contractor's expense.

The Contractor shall not place any paving materials over utility hardware during the project and shall maintain free and unobstructed access to all structures at all times. The contractor shall maintain all covers free of debris and protect the covers, if necessary, from residue that results from the paving operation.

D. Method of Measurement

The quantity to be measured for payment shall be the number of utility hardware units (ea) in each size group actually adjusted as specified under each item. The size of each hardware unit, measured in width, shall be defined as either, the diameter of the exposed edge of the casting, the exposed edge of elliptical castings measured along the major axis, or the exposed edge of the longest side of rectangular frames.

Item 636 MA – Modification of Work Methods to Accommodate Utility Hardware (Under 7" Width)

- Item 636 MB Modification of Work Methods to Accommodate Utility Hardware (7" to under 14" Width)
- Item 636 MC Modification of Work Methods to Accommodate Utility Hardware (14" to under 30" Width)
- Item 636 MD Modification of Work Methods to Accommodate Utility Hardware (30" to under 34" Width)
- Item 636 ME Modification of Work Methods to Accommodate Utility Hardware (34" to under 41" Width)
- Item 636 MG Modification of Work Methods to Accommodate Utility Hardware (41" to under 75" Width)
- Item 636 MH Modification of Work Methods to Accommodate Utility Hardware (75" to under 125" Width)
- Item 636 MI Modification of Work Methods to Accommodate Utility Hardware (125" to under 170" Width)
- Item 636 SMB Modification of Work Methods to Accommodate Utility Steam Hardware (Under and including 8" Width)
- Item 636 SMC Modification of Work Methods to Accommodate Utility Steam Hardware (Above 8" to 34" Width)

A. Price to Cover

The price to modify work methods to accommodate Utility Hardware during payement milling and resurfacing operations shall include the cost of all incremental labor, materials, time, equipment, insurance and incidentals required for removal and disposal of existing pavement, installation and compaction of base and wearing course materials, installation and compaction and removal of temporary asphalt concrete mixture, tack coating; in accordance with the plans, the specifications and the directions of the facility operator in consultation with the Resident Engineer. The price to cover shall further include the cost of maintaining, protecting, and accommodating the integrity of utility street hardware during the project and during the performance of milling and resurfacing and the incremental additional work and effort made necessary to protect pedestrians from injury when crossing utility hardware during the project. The price to cover shall further include additional areas of modification of work methods beyond 12" of the perimeter of the utility street hardware due to the milling equipment and the location of other utility hardware, city street hardware, utility poles, street lights, traffic signals, curbs, sidewalks, medians, guide rails, pavement stops, cobblestones, and pavers. The price to cover for Items 636 SMB and 636 SMC shall also include modification of work methods due to existing concrete collars surrounding these castings.

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. Adjustment to utility hardware shall be paid for under the appropriate JB 636E item.

JB 638NT - FIELD CONSTRUCTED TELECOMMUNICATIONS MANHOLE STRUCTURES

Under this item the Contractor shall perform the complete installation of field constructed utility structures approved by the facility operator in consultation with the Resident Engineer. The utility structure shall be field constructed and installed in compliance with standard utility specifications and/or methods approved by the facility operator in consultation with the Resident Engineer.

A. Description

Installation of field constructed utility structure shall comply with utility standard specifications and/or as directed by the facility operator in consultation with the Resident Engineer and shall include:

- Service Boxes (various sizes)
- Manholes (various sizes)

Where approved by the facility operator, telephone structures may as an alternate be constructed of precast reinforced concrete.

B. Materials

The facility operator will furnish cable racks, pulling-in irons, sump castings, hardware, manhole steps/ladder supports and cast iron frames and covers. All other materials required for a complete manhole installation including concrete, reinforcing steel and structural steel shall be supplied by the Contractor and shall comply with the standards of the facility operator.

The Contractor shall notify the facility operator a minimum of 30 days prior to manhole construction for scheduling materials to be furnished by the utility company. The Contractor shall pick up said materials at the facility operator's yard.

All concrete shall have a minimum compressive strength of 4,000 psi at 28 days.

Reinforcing steel shall be deformed bars conforming to ASTM, Grade 60.

Structural steel shall conform to the requirements of ASTM A-36. Bolts shall conform with the requirements of ASTM A-325.

The Contractor shall supply all necessary materials (mortar, concrete, brick, etc.) for sealing duct entrance windows in manholes and for constructing chimneys and bricking up castings to grade.

C. <u>Method of Construction</u>

All work shall comply with the utility specifications, plans, and standards of the facility operator.

Refer to specification JB 406 for excavation and sheeting requirements associated with telephone manhole construction. Where replacement manholes are indicated on the plans, the demolition

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and removal of the existing manhole structure and the protection of existing cables and splices will be paid separately under JB 638R.

The Contractor shall perform the necessary field construction of the floor, walls, and roof of the utility structure as shown on the Plans and as directed by the facility operator in consultation with the Resident Engineer. No traffic shall be allowed on the structure until permitted by the facility operator in consultation with the Resident Engineer.

Field conditions may require the contractor to modify the design of the manhole structure, as directed by the facility operator in consultation with the Resident Engineer.

Refer to specification JB 636E for guidelines relating to the installation of new frames and covers.

All structural steel roof beams shall be ground free of burrs and painted with one shop coat and two field coats of finish paint. The Contractor shall make provisions for and incorporate into the manhole all required materials as shown on the Plans, standard utility details or as directed by the facility operator in consultation with the Resident Engineer.

The Contractor shall provide duct entry windows in the new manhole as shown on the Plans and as directed by the facility operator. All windows shall be properly sealed around new ducts per utility company requirements.

All cable racks and wall brackets shall be supported on walls with $\frac{1}{2}$ " dia. X 2- $\frac{1}{2}$ " long galvanized steel machine bolts using $\frac{1}{2}$ " concrete inserts or expansion bolts. Vertical spacing of inserts shall not exceed 18" o.c. (typ).

The Contractor shall confirm placement of concrete inserts for cable rack supports, pulling-in irons, and other embedments shown on the Plans with the facility operator, in consultation with the Resident Engineer, prior to manhole construction.

All work shall be done in a workmanlike manner and any damage resulting from the Contractor's operations shall be satisfactorily corrected as directed by the facility operator in consultation with the Resident Engineer and at the Contractor's expense. The contractor shall perform the installation of the utility structure while maintaining, supporting, and protecting and accommodating the integrity of all utility facilities (without disruption of service) located within the areas of the excavation and the field constructed structure.

This item shall also apply when partially or totally rebuilding or modifying an existing utility structure.

The Contractor is advised that in lieu of poured-in-place structures the substitution of Precast Reinforced Concrete Structures that comply with Utility Specifications, will be permitted only when approved by the facility operator in consultation with the Resident Engineer, along with the following provisions:

1. Precast telephone manholes shall be constructed to the interior manhole dimensions and details shown on the Plans.

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- 2. The Contractor shall submit shop drawings and design calculations for each precast manhole structure for review and approval by the facility operator and the Resident Engineer prior to fabrication. Shop drawings shall show the overall structure dimensions, roof openings, window sizes and locations, sump locations, reinforcing steel and details, construction joint types and locations including sealant material proposed. The inside face of all windows (4 sides) shall be beveled and provisions made for all inserts and hardware for a complete manhole installation, including cable pulling iron embedments and cable rack insert embedments in accordance with the standards and requirements of the facility operator.
- 3. Precast manhole design criteria shall be as follows:
 - Concrete Minimum Compressive Strength: 4,000 psi or greater at 28 days.
 - Steel Reinforcement: ASTM A-615, Grade 60.
 - Design Loading: AASHTO HS20-44
 - Shop drawings and calculations shall state design methodology used and all design assumptions including soil pressures and ground water levels used in the design.
- 4. A 9-inch thick compacted stone ballast leveling pad shall be provided as a foundation for all precast manholes.

The quantity to be measured for payment shall be the number of cubic yards (CY) of concrete, cast on site or pre-cast, as specified, concrete, brick, and mortar in place to the nearest hundredth of a cubic yard. No deductions will be made for the spaces occupied by steel reinforcement.

E. Price to Cover

The unit price under this item shall be a unit price per cubic yard (CY) of concrete, cast on site or pre-cast, as specified, concrete, brick, and mortar placed in the field constructed utility structure. The unit price shall cover the cost of all labor, materials, plant, equipment, insurance and incidentals required to field construct partially or totally, rebuild or modify, a utility structure. The unit price shall also include all formwork installation and removal, installation of concrete, bricks, mortar, steel reinforcement, structural steel beams, furnish and install pre-cast concrete, chimney, and installation of interior and exterior hardware, including frames and covers. The Contractor shall also install pipes, conduits, sumps, drains, sleeves, related steel or cast iron materials or equipment through the structures as shown on the drawings. Upon removal of forms, the Contractor shall remove debris and face off the entire interior of the structure. The unit price includes necessary realignment of existing ducts into the new structure up to five feet from the outside face of the new structure; any additional duct realignment required shall be paid under a separate JB item. The unit price shall further include the cost of maintaining, supporting, protecting and accommodating the integrity of all utility facilities (without disruption of service) during the work within the areas of excavation and the field constructed structure, and the furnishing of samples, as required. All work shall comply with the plans, specifications, standards, and directions of the facility operator in consultation with the Resident Engineer.

All pavement breaking, pavement removal and disposal, excavation, haul away, and disposal, furnish and install backfill, temporary pavement, sheeting, bracing, and all necessary incidentals shall be paid under item JB 406, only if required. All required break out and disposal of all types of conduits/duct banks in new structure area, including maintenance and support of cable shall be included in JB 638R. Where precast reinforced concrete manholes are used in lieu of poured in place manholes, the cost for furnishing, delivery and installation of the precast reinforced structures, additional excavation associated with the widening and deepening of trench due to increased width of precast structures and due to the placement of a stone ballast leveling pad; stone ballast; connections; and all work incidental thereto all in accordance with the Plans, Specification and Standards, shall be deemed included under this item. No additional or separate payments will be made for any work associated with the installation of precast reinforced structures.

The cost of providing an anti-freeze additive in concrete, when required, shall be paid for under Item 9.04 HW.

- 1. JB 406
- 2. JB 636E
- 3. JB 638R
- 4. Standard Utility Specifications and Drawings

JB 638RT - BREAK OUT AND REMOVE TELEPHONE/COMMUNICATIONS UTILITY STRUCTURE CONTAINING ACTIVE FACILITIES

A. Description

Under this section the Contractor shall provide all labor, materials, equipment, insurance and incidentals necessary to partially or totally break out and remove existing utility structures using methods approved by the facility operator. Breaking out and removing existing utility structures shall be performed while maintaining and protecting all subsurface facilities, at locations approved by the Facility Operator. The Contractor will encounter various underground facilities, located both inside and outside the utility structure, while partially or totally breaking out and removing existing utility structures and will be required to excavate and perform work over, under, adjacent to, around, in between and in close proximity of various congested configurations of multiple facilities, conduits, pipes and cables.

All work required to partially or totally break out and remove existing utility structures shall comply with standard utility specifications and/or as directed by the facility operator and shall include but not be limited to:

- Service Boxes (various sizes)
- Manholes (various sizes)
- Vaults (various sizes)
- Valve Boxes (various sizes)
- · Concrete encased conduits containing cables

B. Materials

All materials used shall be supplied by the Contractor and comply with the standards of the facility operator.

C. Method of Construction

The Contractor shall perform the necessary breaking out and removal of the existing utility structure while maintaining and protecting all subsurface facilities. The Contractor will encounter various underground facilities located both inside and outside the utility structure, while partially or totally breaking out and removing existing utility structures and will be required to excavate and perform work over, under, adjacent to, around, in between and in close proximity of various congested configurations of multiple facilities, conduits, pipes and cables, as directed by the facility operator. All work shall be done in a workmanlike manner and any damage resulting from the Contractor's operations shall be satisfactorily corrected as directed by the facility operator and at the Contractor's expense.

This item shall also apply when partially or totally breaking out and removing an existing utility structure.

The rebuilding of the utility structure is covered under JB 638NT.

The quantity to be measured for payment shall be the number of cubic yards (CY) of concrete, reinforced concrete, brick, and mortar of the existing utility structure broken out, removed and disposed to the nearest hundredth of a cubic yard. No deductions will be made for the spaces occupied by steel reinforcement.

E. Price to Cover

The unit price bid under this item shall be a unit price per cubic yard (CY) of concrete, reinforced concrete, brick, and mortar of the existing utility structure broken out, removed and disposed. The unit price shall also cover the cost of all labor, materials, plant, equipment, insurance, and incidentals required to partially or totally break out, remove and dispose of existing utility structure. The unit price shall also include demolition of the existing utility structure, haul away and disposal of demolished materials, formwork, concrete, bricks, mortar, steel reinforcement, structural steel beams, interior hardware, exterior hardware, including frames and covers. The unit price shall further include the cost of maintaining, supporting, protecting and accommodating the integrity of all utility facilities (without disruption of service) during the work within the areas of excavation and the existing structure. All work shall comply with the plans, specifications and standards, provided by and at the directions of the facility operator.

The unit price shall include providing access to the facility operator tenants to verify and test cables before, during and after breaking out and removal of the utility and after conduit removal by the Contractor. The unit price shall include, but not limited to, opening and closing of fences; removal and replacement of temporary timber curb and opening and closing of traffic plates. Access to adjacent manholes impacted by the run is included in this item. JB 450 shall not be used in conjunction with JB 638RT as JB 638RT covers access to the work site at all times.

All pavement breaking, pavement removal and disposal, excavation, haul away, and disposal, furnish and install backfill, temporary pavement, sheeting, bracing, and all necessary incidentals shall be paid under item JB 406, only if required.

- 1. JB 406
- 2. Standard Utility Specifications and Drawings

JB 798 - MODIFICATION OF NON CONCRETE YOKE TROLLEY STRUCTURES REMOVAL WHEN CROSSING UTILITY FACILITES

A. Description

This JB item shall only be applied to trolley structure systems that do not contain concrete yoke foundations. This JB item shall only be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities that include but are not limited to:

- 1. Conduits:
- 2. Conductors:
- 3. Concrete encased Conduit banks;
- 4. Steel Pipes; Steam Facilities;
- 5. Oil-o-static Facilities;
- 6. Non-cost Sharing Gas Facilities;
- 7. Steam Facilities;

of various sizes and configurations crossing trolley structures at various angles located within a zone of protection, as indicated on Sketch JB 798, during the removal of trolley structures and subsequent backfilling operations. Utility facilities that run parallel to trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator.

B. Materials - N/A

C. Method of Construction

The Contractor shall maintain, protect, and accommodate the integrity of all utility facilities of various sizes and configurations crossing trolley structures within a zone of protection as indicated in Sketch JB 798, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits at locations determined by the facility operator to expose utility as specified in JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with care to remove existing trolley structure within the zone of protection whose limit shall be defined as a distance of 24 inches from the outside face of each utility crossing.

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on JB Sketch 798, measured along the centerline of trench. The trench is defined as one track set containing two rails. The zone of protection shall be defined, for the purpose of this agreement, as the boundary/area designated on the plans or a boundary/area 24 inches to either side of each of the designated facilities, based upon available records and/or information obtained from prior or new test pits, or any combination thereof. Where overlapping of the zones occurs due to multiple facilities, the boundary/area shall be modified to one zone measured from the outside limits. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

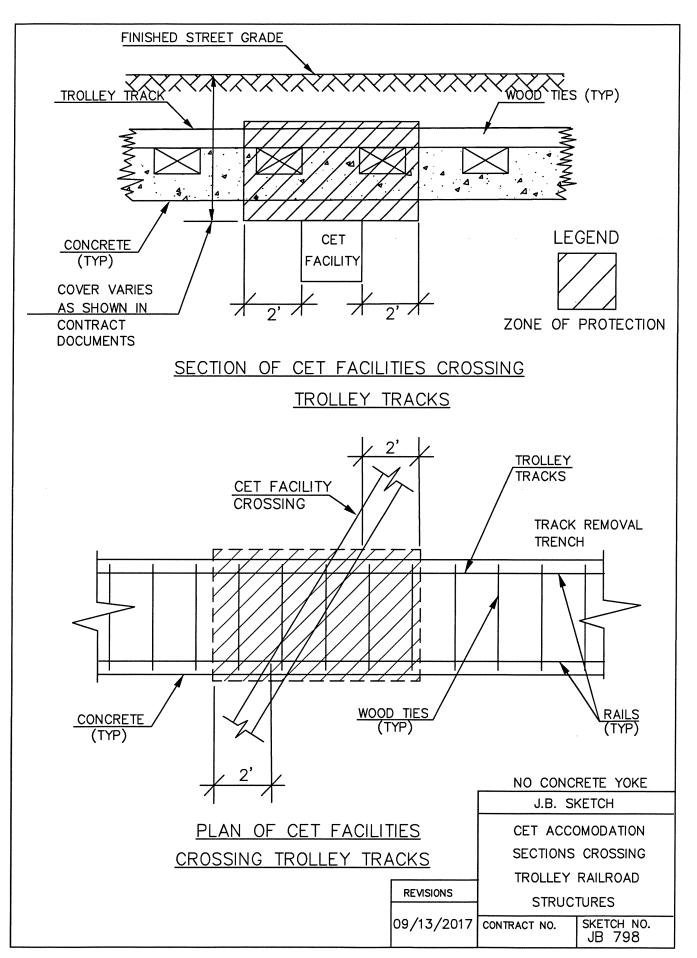
The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities during the removal of trolley structures (including rails, timber ties, trolley conduits and main conduit), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator.

The price shall include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include means to ascertain the numerical relationship between utility and the trolley structure and the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

- 1. NYS Industrial Code Rule 753
- 2. Sketch JB 798



JB 799 - MODIFICATION OF NON CONCRETE TROLLEY STRUCTURES REMOVAL PARALLEL TO UTILITY FACILITIES

A. Description

This JB item shall only be applied to trolley structure systems that do not contain concrete yoke foundations. This JB item shall only be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to:

- 1. Conduits:
- 2. Conductors;
- 3. Concrete encased Conduit banks;
- 4. Steel Pipes; Steam Facilities;
- 5. Oil-o-static Facilities; and
- 6. Non-cost Sharing Gas Facilities;
- 7. Steam Facilities.

of various sizes and configurations paralleling or encroaching trolley structures located within a zone of protection, as indicated on the Plans or as directed by the field representative, during all trolley structure removal operations and subsequent backfilling operations. Utility facilities which cross over, under and between the trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator(s).

B. Materials – N/A

C. Method of Construction

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or encroaching trolley structures within a zone of protection as indicated on the Plans or as directed by the field representative, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits at locations determined by the facility operator to expose utility as specified in JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator(s) to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with care to remove existing trolley structure within the zone of protection whose limit shall be defined as a distance of 24 inches from the outside face of each utility to the edge of the trolley structure.

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on the plans, measured along the centerline of trench. The trench is defined as one track set containing two rails. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

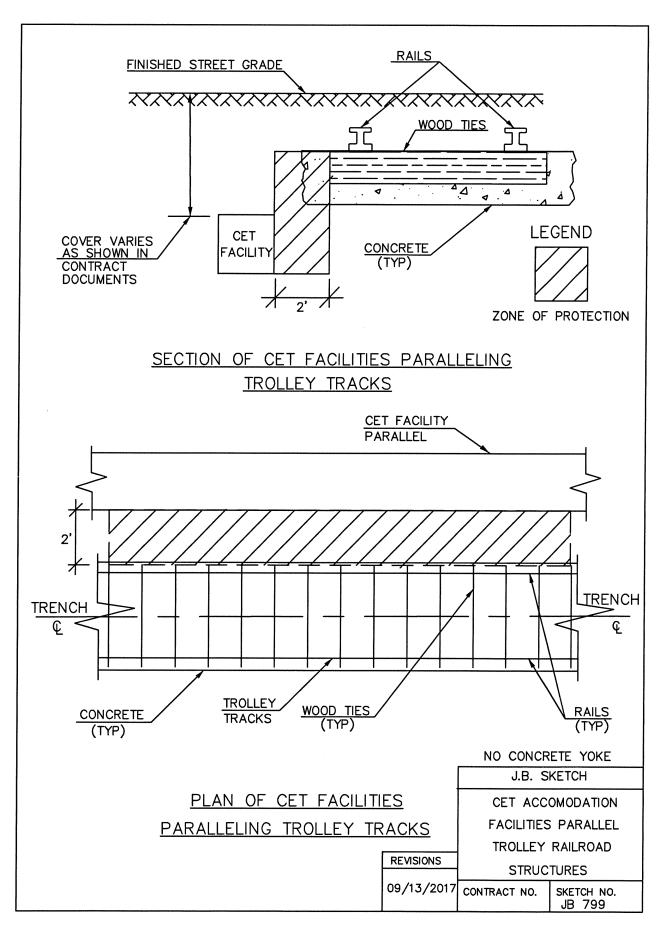
The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or encroaching trolley structures during the removal of trolley structures (including rails, timber ties, trolley conduits, and main conduits), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator(s).

The unit price shall also include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include means to ascertain the numerical relationship between utility and the trolley structure, and the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

- 1. NYS Industrial Code Rule 753
- 2. Sketch JB 799



JB 800 - MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURES REMOVAL WHEN CROSSING UTILITY FACILITES

A. Description

This JB item shall only be applied to trolley structure systems that contain concrete yoke foundations. This JB item shall not be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities that include but are not limited to:

- 1. Conduits
- 2. Conductors
- 3. Concrete encased conduit banks
- 4. Steel pipes
- 5. Oil-o-static facilities
- 6. Non-cost Sharing Gas Facilities and
- 7. Steam Facilities

of various sizes and configurations crossing trolley structures at various angles located within a zone of protection, as indicated on Sketch JB 800, during the removal of trolley structures and subsequent backfilling operations. Utility facilities that run parallel to trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator.

B. Materials - N/A

C. Method of Construction

The Contractor shall maintain, protect, and accommodate the integrity of all utility facilities of various sizes and configurations crossing trolley structures within a zone of protection as indicated in Sketch JB 800, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits to expose the utilities as specified under JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with hand held power tools to remove existing trolley structure within the zone of protection whose limit shall be defined as a perimeter located 24 inches from the outside face of each utility crossing.

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on JB Sketch 800, measured along the centerline of trench. The trench is defined as one track set containing two rails. The zone of protection shall be defined, for the purpose of this agreement, as the boundary/area designated on the plans or a boundary/area 3 feet to either side of each of the designated facilities, based upon available records and/or information obtained from prior or new test pits, or any combination thereof. Where overlapping of the zones occurs due to multiple facilities, the boundary/area shall be modified to one zone measured from the outside limits. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

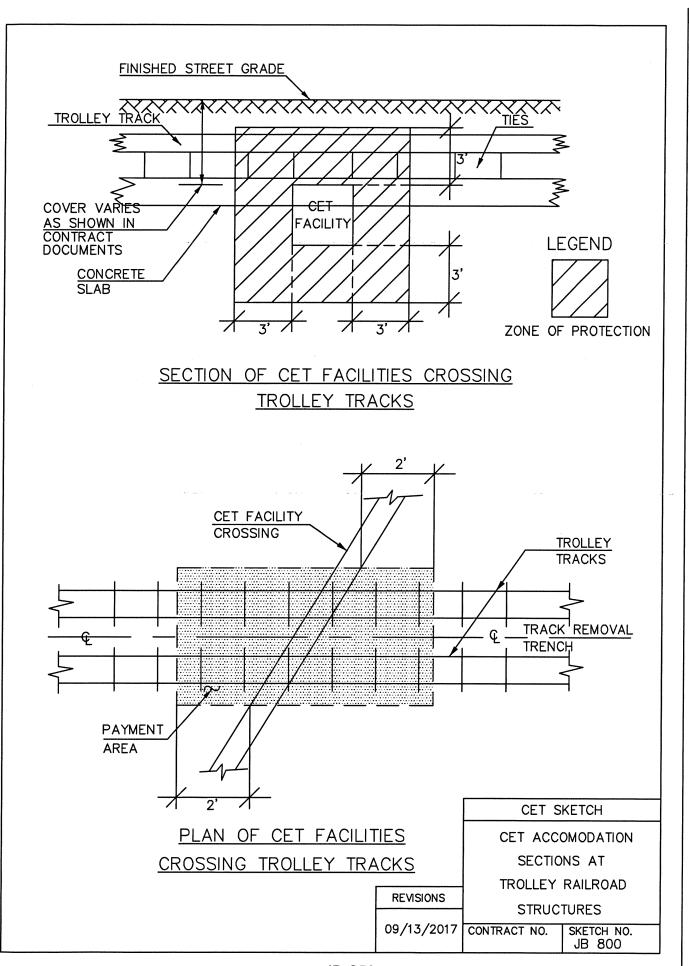
The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain and protect and accommodate the integrity of utility facilities during the removal of trolley structures (including rails, timber ties, yokes, trolley conduits, main conduit, rail and yoke foundations), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator.

The unit price shall also include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The unit price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

- 1. NYS Industrial Code Rule 753
- 2. Sketch JB 800



JB 801 - MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURES REMOVAL PARALLEL TO UTILITY FACILITIES

A. Description

This JB item shall only be applied to trolley structure systems that contain concrete yoke foundations. This JB item shall not be used for trolley systems that have rails and wood ties only.

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to:

- 1. Conduits
- 2. Conductors
- 3. Concrete encased conduit banks
- 4. Steel pipes
- 5. Oil-o-static facilities
- 6. Non-cost sharing gas facilities and
- 7. Steam facilities

of various sizes and configurations paralleling or encroaching trolley structures located within a zone of protection, as indicated in sketch JB 801 or as directed by the field representative, during all trolley structure removal operations and subsequent backfilling operations. Utility facilities which cross over, under and between the trolley structures are not included within this item and will be paid for under the appropriate JB item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and directed by the facility operator(s).

B. Materials - N/A

C. Method of Construction

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or encroaching trolley structures within a zone of protection as indicated in sketch 801 or as directed by the field representative, during removal of trolley structures and subsequent backfilling and compaction operations under other contract item(s). The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the utility and ascertain the numerical relationships and/or dimensions of these utilities with respect to the proposed excavation. Contractor shall perform test pits to expose the utilities as specified under JB 400. Upon exposing the affected utilities sufficiently, and at the sole discretion of the facility operator(s) to determine relationships and/or dimensions, the Contractor shall be permitted to proceed with hand held power tools to remove existing trolley structure within the zone of protection whose limit shall be defined as a perimeter located 24 inches from the outside face of each utility.

The quantity to be measured for payment shall be the number of linear feet of modified trolley structure removal within the zone of protection as indicated on the plans, measured along the centerline of trench. The trench is defined as one track set containing two rails. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

E. Price to Cover

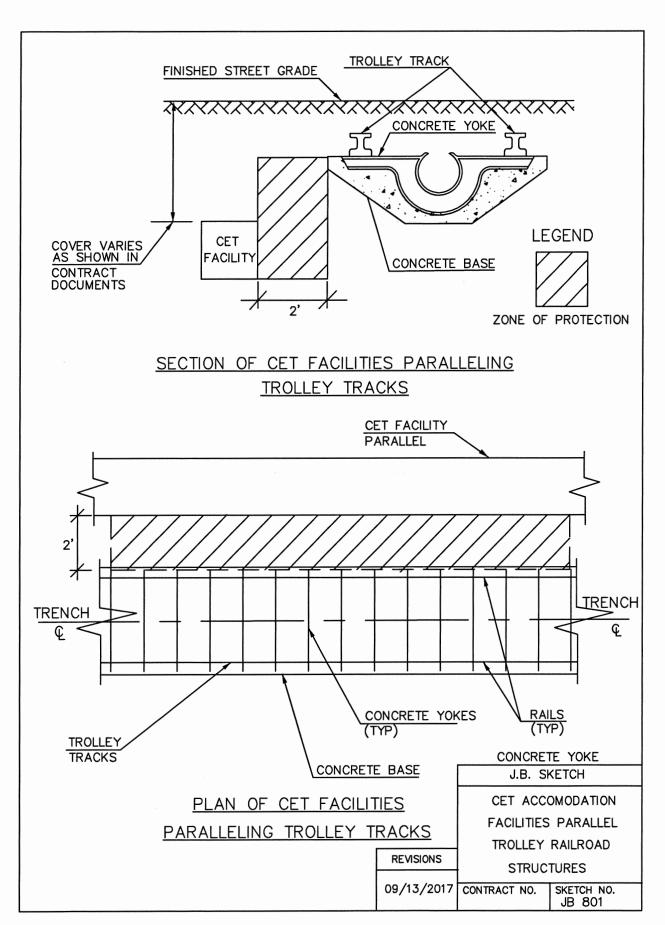
The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or encroaching trolley structures during the removal of trolley structures (including rails, timber ties, yokes, trolley conduits, main conduit, rail and yoke foundations), and backfilling and compacting within a zoned area designated for protection of utilities by the facility operator(s).

The unit price shall also include any additional cutting, removing and disposing of roadway materials; hand or machine excavation; trucking and disposing of excavated materials, installation and removal of sheeting; and furnishing, installing and compacting backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The unit price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to trolley demolition operations that are not performed in accordance with the specifications.

When this work is performed within a mass excavation area, a credit will be taken for the removed trolley structure.

- 1. NYS Industrial Code Rule 753
- 2. Sketch JB 801



JB 802 - SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS AND SIDEWALKS

A. Description

Under this Section, the Contractor shall be required to modify work methods of installing new curb and sidewalk in order to maintain, protect and accommodate the integrity of private Utility Facilities located within a zone of protection immediately beneath existing sidewalk and curb designated to be replaced under other Contract items. The zone of protection shall define an area of curb and sidewalk where: work is within the vicinity of private Utility Facilities as shown on the Special Care Excavation Plan or where utilities are encountered during construction that are within 18 inches of either face of curb and/or 12 inches of the base material of proposed curb and/or sidewalk.

B. Materials - N/A

C. Method of Operation/Construction

Once clearances have been verified by available records to the satisfaction of the facility operator, the Contractor shall exercise extreme caution to install new curb and sidewalks within zoned areas of protection. Exercising extreme caution shall mean utilizing appropriate methods of operation/construction, special operations and sequencing, and by employing hand labor, using hand held tools only, under the personal direction of the appropriate facility operator. The work shall incorporate, but not be limited by, the following restrictions:

1. Removal of Existing Curb and Sidewalk

Removal of existing curb and sidewalk material shall be performed by saw cutting the curb and sidewalk, for a depth of not less than 2", to assist the Contractor in breaking up the concrete curb and sidewalk for removal by hand. Curb and sidewalk removal shall be done with hand labor, using hand held tools only while working from adjacent undisturbed sidewalk and/or pavement. Furthermore, it shall be understood to mean that digging and/or excavating directly with power-mechanized earth moving equipment will <u>not</u> be permitted. Power mechanized earth moving equipment may only be used as a depository of material removed from the excavation by hand as described above. All equipment, methods, and maintenance and protection provisions shall require full authorization by the facility operator.

2. Preparation and Installation of New Curb and Temporary and New Sidewalk

Backfilling, filling, grading of sub base, and installation of new curb and both temporary and new sidewalk, as required under other Contract Items, shall be performed utilizing materials, equipment and methods of construction that will insure the integrity of the private utility facilities and at the same time meet all requirements for this work as specified in other sections of this contract.

3. Compaction

The Contractor shall compact all sub-grade and new sub-base materials by utilizing native and/or blended fill material, equipment and methods of construction that will ensure integrity of private Utility Facilities and at the same time meet all requirements for compaction as specified in Section 4.11 of the Standard Highway Specifications.

4. Powered Excavating Equipment Limitations

The Contractor shall not employ powered or mechanical excavating equipment within the zone of protection. Powered or mechanical excavating equipment may only be used as a depository for material removed from the excavation by hand as described above.

The Contractor shall not be permitted to store, stand and/or travel equipment/vehicles on specified unpaved zoned protection areas.

D. Method of Measurement

1. ITEM JB 802A

The quantity of "Special Care Excavation and Restoration for Sidewalk Work" to be measured for payment shall be the number of square feet (SF) of new sidewalk actually installed under other contract items within the zone of protection areas requested by the facility operator. For payment purposes, the horizontal limits for a zone of protection area shall be defined as the area designated on the plans or an area equal to the length of the designated facility multiplied by its width plus 18 inches on each side. Where overlapping of zones occur due to multiple facilities, the area will be modified to one zone measured from the outside limits. Where the 18-inch area falls beyond the curb line the outside boundary shall be the curb line.

2. ITEM JB 802B

The quantity of "Special Care Excavation and Restoration for Curb Work" to be measured for payment shall be equal to the number of linear feet (LF) of new curb actually installed under other contract items within the zone of protection areas requested by the facility operator.

E. Price to Cover

1. ITEM JB 802A

The contract price per square foot for "Special Care Excavation and Restoration for Sidewalk Work" shall be the incremental cost difference of all labor, materials, equipment, insurance and incidentals required for excavation and disposal of pavement, base and all other material to new sub-grade within and adjacent to zone of protection areas; saw cutting, grading, preparation of sub-grades, backfilling and compaction within zone of protection areas; all in accordance with the plans, the specifications and the directions of the facility operator. The price shall further include the cost of maintaining, protecting and accommodating the integrity of private Utility Facilities during the performance of sidewalk reconstruction (under other Contract Items) within zone of protection areas designated on the plans or as directed by the facility operator.

2. ITEM JB 802B

The contract price per linear foot for "Special Care Excavation and Restoration for Curb Work" shall be the incremental cost difference of all labor, materials, equipment, insurance and incidentals required to install new curbs and temporary restoration material under other Contract items, within and adjacent to zone of protection areas; all in accordance with the plans, the specifications and the directions of the facility operator. The price shall further include the cost of maintaining, protecting, and accommodating the integrity of private Utility Facilities during the performance of curb reconstruction (under other Contract Items) within zone of protection areas designated on the plans or as directed by the facility operator.

Payment for all work specified herein shall be made on a one-time basis only; no payment will be made for the same area of sidewalk or length of curb more than one time. In addition, work under these items shall not be paid in combination with other utility items.

F. References

1. Section 4.11 Standard Highway Specification

JB 803 - LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS

A. Description

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to oil o static facilities, and any other facilities of various sizes and configurations paralleling or crossing proposed saw cut areas located within a zone of protection associated with roadway removal operations, as determined by the utility operator. Utility facilities which cross under and between the saw cut area are included within this item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and determined by the facility operator(s).

B. Materials - N/A

C. <u>Method of Construction</u>

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or crossing the saw cut area within a zone of protection as determined by the Facility Operator, during the roadway saw cut. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use pneumatic tools to line cut the pavement in lieu of saw cut by machine. It is the sole discretion of the facility operator(s) to determine relationships and/or dimensions, and advise the Contractor to proceed with pneumatic tools to line cut existing roadway structure.

D. Method of Measurement

The quantity to be measured for payment shall be the number of linear feet of line cut performed by pneumatic tools measured along the length of cut. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

JB 803.1 Line cut Asphalt Roadway (LF)

JB 803.2 Line cut any combination of Asphalt and Concrete Roadway (LF)

JB 803.3 Line cut any combination of Asphalt, Concrete, and Belgium Block (LF)

E. Price to Cover

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or crossing the saw cut area associated with the removal of roadway designated for protection of utilities by the facility operator(s).

The unit price shall also include any additional cutting, removing and disposing of roadway materials; and any backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to saw cutting operations that are not performed in accordance with the specifications.

F. References

1. NYS Industrial Code Rule 753

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

Sub-Surface Structure Break Out, Rebuild & Breaking Out a Point of Entry (POE's) Into Sub-Surface Structures

Performed by

Municipal Contractors

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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, can identify 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 take prompt corrective measures to eliminate the 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 subsurface structure or an Electrical Enclosed Space to monitor the authorized entrants and to perform duties assigned including aiding individual(s) 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 (ECQMC) employee can identify varying workplace electrical hazards relating to the specific operation and has the authority to take appropriate actions, as required. To meet the task specific qualifications of this guideline. the ECQMC employee must be familiar with this document, be able to demonstrate adherence, conduct job briefings and be present during critical tasks and/or operations to ensure that all crew members understand hazards associated with the job, work

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procedures involved, special precautions, energy source controls and personal protective equipment requirements. The ECQMC should be onsite during the performance of all tasks in which ECQMC employees may be exposed to electrical hazards either noted in applicable sections of this quideline and/or listed in Appendix B – PI Check Point Tasks.

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 safetyrelated work practices outlined in this guidance document. Prior to entry into structures outlined in this procedure, the ECQMC employee shall ensure that any employee entering is trained and qualified.
- **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 safetyrelated 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-thejob 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)

All subsurface electric cable systems and related components shall be considered to be energized until they have been verified as being de-energized by qualified Con Edison electrical personnel. Prior to the state of conduit removal operations, the identity and content of the facility (conduit and cable contained therein) shall be

verified utilizing applicable Con Edison maps & plates. In case of any safety concern, the option of de-energizing shall be discussed with the PI Representative. Caution shall always be employed whenever conduits are opened to expose the interior, even if the Con Edison maps and plates indicate no live facilities.

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 inspection will determine if the condition of the electrical facilities contained therein is sufficient to allow need based unrestricted access. The Con Edison electrical personnel will communicate to both PI Representative and to the ECQMC personnel any safety precautions to be taken and that the subsurface structure is safe for entry and document such findings. 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 unless the ECQMC has met the requirements outlined in Section 4.7.a. Inspections include but are not limited to:

- 1) Testing for stray voltage by a qualified Con Edison employee or an ECQMC employee who has completed applicable Con Edison training courses.
- 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.
- A copy of the underground inspection form can be reviewed in the field with the PI Representative in consultation with the qualified Con Edison electrical personnel upon request by the ECQMC.

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 performance of the work. The Electrically Competent Qualified Municipal Contractor shall document completion of the job briefing. A copy of the documented job briefing shall 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 documented 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 subsurface structures shall refer to and comply with applicable OSHA requirements regarding the use of Personal Protective Equipment when performing this work. Con Edison also requires that Municipal Contractor personnel assigned to work inside Con Edison sub-surface structures shall always wear Flame Resistant (FR) Clothing with a rating of 8 cal/cm^2 or HR2, wear 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 0
Gloves | FR
Clothing | FR
Hood | Blast
Goggles | Face
Shield | Safety
Glasses |
|---|---|-------------------|----------------|------------|------------------|----------------|-------------------|
| 1 | Pavement breaking | N | N | | | | Y |
| 2 | Breaking out concrete encased duct | Υ | Y | | | Υ | Y |
| 3 | Moving energized primary cables that are located outside a structure while in proximity to joints | Υ | Y | Υ | Y | | |

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|---|---|--|--|--|--|
| Moving primary cables outside a structure (no joints involved) | • | Y | | | Y |
| Moving energized secondary cables | Υ | Y | | | Υ |
| Hand excavate to locate precast ducts | N | N | | | Υ |
| Hand excavate to locate direct buried cables | Y | Y | | | Υ |
| Removing cable from conduit | Υ | Y | | | Υ |
| Breaking structure for POE from outside/inside | Y | Y | | Y | Υ |
| Breaking sub-structure walls | Υ | Υ | | | Υ |
| Pulling rope within structure with energized cable | Y | Y | | | Υ |
| Pulling rope in enclosed spaces | Y | Y | | | Υ |
| Building a bench or platform within a subsurface structure to support or protect cables. | Y | Y | | | Y |
| Breaking out unknown precast electric duct | Y | Y | | | Υ |
| Using digging bar over electric facility | Y | N | | | Υ |
| Using digging bar over direct buried | Y | Y | | | Υ |
| Using Pneumatic clay digger in | Y | Y | | | Υ |
| Installing forms for field-constructed sub- surface structures from inside the designed footprint when connected cables are present | Y | Y | | | Y |
| Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present | N | N | | | Y |
| Installing forms for field-constructed subsurface structure prior to first energization of new cables | N | N | | | Y |
| Saw cutting operation | Υ | N | | | Υ |
| Hand excavate to locate cable fault | Υ | Y | | | Υ |
| Hand excavating to find service dead leg | Y | Y | | | Υ |
| Removing underground silo | Υ | Y | | | Υ |
| Regrade | Υ | N | | | Υ |
| Build/remove shunt box w/
energized cable inside | Υ | Y | | | Υ |
| | Moving energized secondary cables Hand excavate to locate precast ducts Hand excavate to locate direct buried cables Removing cable from conduit Breaking structure for POE from outside/inside Breaking sub-structure walls Pulling rope within structure with energized cable Pulling rope in enclosed spaces Building a bench or platform within a subsurface structure to support or protect cables. Breaking out unknown precast electric duct Using digging bar over electric facility Using digging bar over direct buried cables Using Pneumatic clay digger in vicinity of electric facility Installing forms for field-constructed sub- surface structures from inside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structure prior to first energization of new cables Saw cutting operation Hand excavate to locate cable fault Hand excavating to find service dead leg Removing underground silo Regrade Build/remove shunt box w/ | structure (no joints involved) Moving energized secondary cables Hand excavate to locate precast ducts Hand excavate to locate direct buried cables Removing cable from conduit Breaking structure for POE from outside/inside Breaking sub-structure walls Pulling rope within structure with energized cable Pulling rope in enclosed spaces Pulling rope in enclosed spaces Breaking out unknown precast electric duct Using digging bar over electric facility Using digging bar over direct buried cables Using Pneumatic clay digger in vicinity of electric facility Installing forms for field-constructed sub-surface structures from inside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structure from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structure from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structure from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structure prior to first energization of new cables Saw cutting operation Y Hand excavate to locate cable fault Y Hand excavate to locate cable fault Y Hand excavate to locate cable fault Y Hand excavating to find service dead leg Removing underground silo Y Regrade Build/remove shunt box w/ Y | structure (no joints involved) Moving energized secondary cables Y Y Hand excavate to locate precast N ducts Hand excavate to locate direct Y buried cables Removing cable from conduit Y Y Breaking structure for POE from Y outside/inside Breaking sub-structure walls Y Y Pulling rope within structure with Y energized cable Pulling rope in enclosed spaces Y Y Building a bench or platform within Y a subsurface structure to support or protect cables. 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Breaking out unknown precast Y electric duct Using digging bar over electric Y facility Using digging bar over direct buried cables Using Pneumatic clay digger in vicinity of electric facility Installing forms for field-constructed sub-surface structures from inside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed Subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed N N N subsurface structure prior to first energization of new cables Saw cutting operation Y Hand excavate to locate cable fault Y Hand excavate to locate cable fault Y Hand excavating to find service dead leg Removing underground silo Y Build/remove shunt box w/ Y | structure (no joints involved) Moving energized secondary cables Hand excavate to locate precast ducts Hand excavate to locate direct buried cables Removing cable from conduit Breaking structure for POE from outside/inside Breaking sub-structure walls Pulling rope within structure with energized cable Pulling rope in enclosed spaces Pulling rope in enclosed spaces Breaking out unknown precast electric duct Using digging bar over electric facility Using flaging bar over direct buried cables Using Pneumatic clay digger in vicinity of electric facility Installing forms for field-constructed sub-surface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed subsurface structures from outside the designed footprint when connected cables are present Installing forms for field-constructed Saw cutting operation Y N N N N N N N N N N N N N N N N N N |

3.10 Access

Municipal Contractor personnel shall not climb into or out of Con Edison sub-surface structures by stepping on cables or hangers.

4.0 Removal of Conduit from Cables, Moving Energized Underground Cables & Working in Open Trenches / Excavations that Contain a D-Fault.

4.1 Purpose

Establish a guideline that shall be employed by Electrically Competent Qualified Municipal Contractor personnel, meeting OSHA & Con Edison training requirements, when removing conduit from cables and moving Con Edison energized underground cables located outside or inside structures and working in open trenches / excavations that contain a cable with a D-Fault condition.

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 inside or outside of Con Edison structures. Only Electrically Competent Qualified Municipal Contractor personnel who have been trained and meet necessary OSHA & Con Edison requirements for moving energized underground cables 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 documented job briefing with the Municipal Contractor's employees involved before the start of 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 shall be available upon request by Con Edison.

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. Refer to Appendix A for additional requirements and resources.

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 to be directed across the top of the conduit away from any cable that may be inside of the conduit.

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- 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 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 ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" e.g., Norplex Micarta NEMA Grade G-3 or G-10) 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 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 4.7, below.

4.5.2 Concrete Encased Conduit

- a- The concrete encased conduit (including but not limited to precast, 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 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 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 to be directed across the top of the duct, away from the cable.
- e- A small piece of the concrete conduit shall be chipped away to permit verification of the presence of cable inside the conduit.

- f- 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 NEMA Grade G-3 or G-10) shall be used for this purpose. This shield material shall provide protection for the cable during the remaining conduit removal operation.
- g- After installation of the shield material has been completed, continue removal of remaining conduit and encasement, using handheld and power tools.
- h- During and after conduit removal operations, cable/conduit shall be properly supported as indicated in Section 4.7, 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 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 NEMA Grade G-3 or G-10) 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 4.7, 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 to be directed across the top of the duct, away from the cable.

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- b- Pneumatic Rotary Cutting Tool A pneumatic rotary cutting tool, with a depth guide, 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 ¾ 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 ¾") or suitably reinforced plastic sheet material (min. thickness 0.060" e.g., Norplex Micarta NEMA Grade G-3 or G-10) 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 shall first excavate and expose a collar connecting two sections of conduit. Once the collar is accessible, split and/or cut the collar off with a cutting tool that has a depth guide 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. If work is required in the presence of a natural gas leak, further guidance will be provided by the PI Representative in consultation with Con Edison's Gas Engineering Department
- 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 4.5.5.b.
- 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 4.5.5.b.

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

a- Municipal Contractor personal shall not move any cables or splices within an electrical manhole. Moving cables within an electrical manhole and splices regardless of location may only be performed by qualified Con Edison electrical personnel unless the Municipal Contractor personnel has completed applicable Con Edison training courses and has provided written proof of said training to the PI Representative. Whenever cables located in open excavations are moved, the Municipal Contractor shall protect the cables by ensuring the cable jacketing is not subjected to sharp edges or over bending as it exits the existing structure or the footprint of the existing structure if said structure has been demolished or is in the process of being demolished and/or rebuilt.

- b- 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 Section 3.4 of this guideline.
- c- Municipal Contractor personnel meeting the training requirements and experienced in moving Con Edison cables only shall move cables.
- d- Cables shall not be moved until plastic "fair-leaders" are positioned at the duct edges to prevent chaffing damage.
- e- 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.
- f- Conduit which house cables shall be supported using slings, cable, or rope. Conduits shall be supported in such manner as to maintain alignment with one another.
- g- Maximum distance between support points shall be four (4) feet.
- h- 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.
- i- 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.
- j- Relocation of cables shall always be performed in a careful manner with the movement of cable under complete control. There shall be no sudden movements of the cable or the conduit that contains cable.
- k- An observer shall be positioned 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.
- I- 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.
- m- Cables shall not be permitted to fall freely from temporary supports.
- n- All cables supported by slings shall be visually inspected by the ECQMC personnel at the beginning and end of each work shift to ensure that no cracks, leaks, or other defects have developed.
- o- Cables shall be repositioned with care when being moved into their final position for the installation of split conduit.

4.8 Working in Open Trenches/Excavations that Contain an Energized a D-Fault

- **4.8.1** A D-Fault is defined as an abnormal condition found on an energized primary cable or splice that is presumed to be an indication of an impending fault. If the ECQMC personnel notices an abnormal condition on cable in a trench or excavation work must stop and the PI Representative shall be notified immediately to provide further guidance. If the PI Representative in consultation with qualified Con Edison electrical personnel deem the cable condition a D-Fault, the ECQMC personnel shall follow the directions noted below to continue work.
- **4.8.2** At distances greater than 20 feet from the energized D-Fault, no additional personal Protective Equipment (PPE) other than that referenced in Section 3.9 is required.
- **4.8.3** At distances greater than 10 feet but less than 20 feet from the D-Fault, a hard-hat mounted face shield is required in addition to PPE referenced in Section 3.9 above.
- **4.8.4** At distances greater than eight feet but less than 10 feet from the energized D-Fault, a hard-hat mounted full-face shield and a FR Hood in required in addition to PPE referenced in Section 3.9 above.
- **4.8.5** At distances less than eight feet from the D-Fault, no work shall be performed.
- **4.8.6** Movement of D-Faulted cable is strictly prohibited.

4.9 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 Sub-Surface Structure Break Out/Rebuild or Breaking Out a Point of Entry (POE's) in an Electrical Enclosed Space

The ECQMC must be present onsite with the municipal contractor crew to conduct the documented job briefing on each day any breakout operations are to be performed. This includes structure entry for POE, structure break out and/or rebuilds. The ECQMC shall address hazards, live cables, necessary PPE with other municipal contractor employees & request assistance from the PI Representative to arrange any required inspections with qualified Con Edison electrical personnel for any cable movement or adjustments. The ECQMC should refer to section 3.0 through 3.10 & section 4.7 of this procedure for all activities required prior to sub-surface structure entry and cable moving operations respectively. A copy of the documented job briefing shall be available upon request by Con Edison.

5.1 Activities Prior to Sub-Surface Structure Break Out, Rebuild or Creating POE's

- **5.1.1** Prior to the start of breakout operations, the location of all conduit and cable passing through the section of the wall and beneath the structure floor that is going to be broken out shall be visually identified inside and outside the structure.
- 5.1.2 When there is a potential for contact between the existing cables that have been visually identified and the tool being used to break the structure, the ECQMC shall discuss with the Public Improvement Representative if there is a possibility that Electric Operations can de-energize the cables that are in the potential zone of contact prior to breaking out the structure.
- **5.1.3** When the cables cannot be de-energized by Electric Operations then they must be protected by using acceptable non-conductive materials as noted in Section 5.2.
- **5.1.4** After cables have been protected, they shall be moved by qualified Con Edison electrical personnel or an ECQMC who has met the requirement of Section 4.7 above.
- **5.1.5** All primary cables shall be moved by or under the direct supervision of qualified Con Edison electrical personnel.

5.2 Structure or POE Break Out Operations

- **5.2.1** Using caution, expose the exterior sections for the structure that is required to be broken out typically done in 2' deep vertical sections) by carefully excavating on the outside of the structure. If conduit has been identified to be passing under the structure, take necessary precautions noted below.
- **5.2.2** Visually identify all conduits and cables passing through the structure and beneath the structure floor as well.
- 5.2.3 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 structure walls, roof floor and/or POE, protect the cables using fire rated (FR) wood, phenolic board, cable shields or other acceptable non-conductive materials., 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 and the tool being utilized to break the structure.
- **5.2.4** Once all conduits and cables have been identified and protected on both the inside and the outside of the structure walls and beneath

the structure floor; and the structural integrity of the proposed break out area has been confirmed using hand tools, use the appropriate tool (up to and including a 90-pound jackhammer) to break out the section of structure wall, roof or floor that was previously prepared for break out

- **5.2.5** If a jackhammer is being used for the structure wall, roof, floor or POE breakout operation, where feasible, support the tool from underneath to prevent slippage.
- **5.2.6** Where possible, the use of a 90 lb. jackhammer shall be avoided within 8" of a live conduit. If the ECQMC's 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.
- **5.2.7** After the top sections of roof or wall has been broken out, continue to excavate down to expose the next section of that wall to be broken out and repeat the process starting with section 5.2.1
- **5.2.8** For all additional walls in the structure that need to be broken out, resume operation starting with section 5.1 of this procedure.

APPENDIX – A – Breaking Out Conduit Checklist, On-the-Job Training (OJT) & Video

| Contractor | | | | -Out Conduit Pre | | | |
|--|---|-----------|---|-------------------------------------|---------------|--|--|
| Location | | | A CONTRACTOR OF THE ABOVE AND A SECOND OF THE ABOVE AS A SECOND OF THE | eted by the For | | | |
| Date and Time | | | | s enter or chan
Briefing is admi | | | |
| Date and Time | 1 | | caon ame a sou | Driejing is duini | motered. | | |
| Roles Review | Name(s) of Individuals v | -site | Training in
Compliance and | | on's Initials | | |
| Security Colors Colored Colors (Colored Colored Colore | throughout this task's p | rogress | Qualified for task? | Con Edison | Contractor | | |
| Foreperson | | | Yes / No | | | | |
| Individual Completing
On-site Peer Check | | | Yes / No | | | | |
| Laborer(s) performing
break-out | | | Yes / No | | | | |
| Con Edison On-Site
Representative | | | Yes / No | | | | |
| Layout # Duct(s) in Trench/Manhol Duct Type (CD, CED, HDPE Are there Primary / Secon - What is energized? At a Are duct banks clear of all Is there line of sight and a Will cable be moved? If so will it be supported? How will bodies and tools | Metal) idary electric lines? what voltages? I debris? Il edges and corners? o, to where and how | | | | | | |
| Personal Protec | tive Equipment | | | | | | |
| ☐ Safety Boots | | | 0 kV Gloves (Test Date | e on gloves: |) | | |
| ☐ Hard Hat | | | Leather Gauntlets | /FO 10120\ | | | |
| ☐ Safety Glasses | | | ☐ Is a Harness Required? (EO-10130) ☐ FR Hood and Goggles (if Primary in structure) | | | | |
| ☐ Face Shield ☐ Flame Retardant (| Coverelle | <u> </u> | FK Hood and Goggles (| it Primary in sti | ucture) | | |
| ☐ Flame Ketardant (| Coveralis | | | | | | |
| Tools - All tools | to be laid out in | work area | a prior to start | of activity | 1 | | |
| Cross Settle William | to be full out III | | | | | | |
| ☐ Claw Hammer
☐ Chisel with at leas | at 2" wide flat hit | | ☐ Chipping Gun, must be less than 20 lbs Recommended 2"-4" piston stroke and < 1,500 BPM | | | | |
| ☐ Chisel with at leas ☐ 3 lbs. Hammer | SLZ WIGE HALDIT | | carta or similarly approv | | | | |
| | mer | | | | | | |
| ☐ 8 lbs. Sledgehammer ☐ | | | Pneumatic Rotary Cutting Tool and Blade (HDPE pipe) | | | | |

DOJT -OJT0070 PROCEDURE FOR REMOVING CONDUIT FROM UNDERGROUND DISTRIBUTION CABLE

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PROCEDURE FOR REMOVING CONDUIT FROM UNDERGROUND DISTRIBUTION CABLE

- Underground electric cables are protected by conduit pipes which are buried under the roadway in the ground. The conduit protects the high voltage cables placed inside them from damage from shovels, digging bars and other work activities when excavating in the area to install new equipment. Even when using these manual devices to unearth existing ducts, extreme care must be taken not to pierce, cut, or break open the duct unless the safeguards listed in the following pages are used for your safety and the protection of the cables on the inside.
- A mechanical machine such as a backhoe should <u>never</u> be used to excavate around electric or gas facilities. The likelihood of the facility being damaged increases significantly when such practices are used.

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GETTING PREPARED TO LOCATE DUCTS

- Before removing asphalt and concrete roadbase make sure a code 753 has been called in with the 811 center and spray marks are in place on the ground showing the path of the electric and gas lines.
- Check the spray painted mark outs against the Con Edison plates and prints.
 (Layout diagram, Conduit plate, Composite Feeder Plate, Low Tension mains & service and Gas Mains & Service Plate). Ask your Con Edison Representative to review these prints and the markouts with you.
- Remove concrete and asphalt within your new work zone with machine. Load out debris.
- Use a backhoe only to dig up areas where you have verified that there are no electric or gas facilities.

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DIGGING IN AREAS WHERE YOU HAVE ELECTRIC, GAS FACILITIES, OR HAVE DISCREPANCIES BETWEEN THE MARKOUTS AND PRINTS

- Dig only using shovels and blunt edge digging bars to find electric and gas facilities. Never strike a blunt edged digging bar straight down into the soil.
 Precast, HDPE, Cast Iron & plastic gas mains/services can lie a few inches under the surface and the bar can still penetrate through them if you are not careful.
- When using a digging bar on hard, compacted soil, use a sideways striking motion toward the sides of the excavation, never straight down.
- Continuously remove soil from area, keep area clean of debris, locate ducts edge to edge to keep line of sight.
- Use air lance to blow out tight areas between facilities to visualize work zone.

4

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PRE-JOB CHECKLIST



- A new Breaking-Out Conduit Pre-Job Checklist must be completed by the Foreperson each time individuals enter or change roles, and each time a Job Briefing is administered.
- All tools to be laid out in work area prior to start of activity



5



PREPARE AREA FOR DUCT BREAK OUT

- Additional guidance for routine entry into electrical enclosed space is provided in GEHSI-S17.01 – Electrical Enclosed Space Entry.
- Once you have dug down and located duct banks make sure you clear all debris (soil, rocks) from the trench to visually have a line of site of all edges and corners.
- Determine if you need to remove the duct/s from the electrical conduit to move them to make room for the installation of additional new facilities. (WINGBACK).
- If necessary to conduct a removal: Address the PPE Requirements, work
 procedures and tools to be used on the following pages with the workers. Stress
 the importance of following procedures to avoid a high hazard injury such as
 shock or burns. Document in your safety briefing.

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PPE REQUIREMENTS DURING DUCT BREAKOUT IN A TRENCH OR ENCLOSED SPACE

NOTE: ONLY COTTON WORK CLOTHS UNDERNEATH FR SUITS

You must wear an FR coverall during all duct break out procedures. Remove jewelry (chains, watches, rings, earrings)



You must wear Class 0 kV gloves, leather gauntlet leather protectors, helmet, safety glasses and face shield



Class 0 kV Gloves, Gauntlets, Safety Glasses, Face Shield, Helmet.

5



PPE REQUIREMENTS DURING DUCT BREAKOUT IN AN ELECTRICAL ENCLOSED SPACE

NOTE: ONLY COTTON WORK CLOTHS UNDERNEATH FR SUITS

You must wear an FR coverall and rescue harness during all duct break out procedures inside the EES. Remove jewelry (chains, watches, rings, earrings)



FR Coverall & Rescue Harness

You must wear Class 0 kV gloves, leather gauntlet leather protectors, helmet, safety glasses and face shield



Class 0 kV Gloves, Gauntlets, Safety Glasses, Face Shield, Helmet.

8



EQUIPMENT / TOOLS NEEDED FOR BREAKING OUT DUCTS

Precast Concrete Conduit



Only use small hammer to strike duct edges.

Insert Micarta to protect cable, keep striking away from center.

Slide Micarta along as you break off desired length of duct

Concrete Encased Duct



When breaking out concrete encased ducts the only tools to be used are: hammer, 3 lb. hammer With wood/plastic handle, chisel with 1.5" head, 8 lb. Sledgehammer by striking duct edges.

If concrete is not breaking with these tools, a 20 lb. chipping gun with a 1.5" head can be used.

Make a window in the Duct, slide in a Micarta board and continue breaking out the remaining duct.

See sequence on next page:















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CONCRETE ENCASED DUCT BREAKOUT SEQUENCE



Use a 3 lb. hammer striking edges.

Advance to hammer & chisel with 1.5" head

If this is still not working, go to #2



Use 8 lb. sledgehammer striking Edges, not center.

If this is still not working, go to #3

2



Use a <u>lightweight Chipping gun</u> with a 2 to 4" piston stroke with a <u>1.5" head</u> breaking toward edges, never straight down.

NEVER USE A JACKHAMMER, A RIVET BUSTER CHIPPING GUN, OR A BIT IN THE CHIPPING GUN LESS THAN A 1.5" HEAD. If this is still not working, go to #4



Visualize work zone when breaking away Material. Keep work zone clean. Remember That electrical ducts are usually stacked in Multiple rows and levels.

1

3

1

10

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BREAKING OUT INTERIORS OF CONCRETE/CLAY DUCTS



Find edges & visualize all ducts. Remember that There could be several across and underneath. Keep area clean, so you can tell configuration.



Break out window on each top duct found. Strike Away From the center.



Insert Micarta "half moon" protective insert in windows on ducts, Continue breaking top rows of ducts in a horizontal direction sliding Protective Micara down the run while breaking the top & sides.

5

6

7

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HDPE (PLASTIC) CONDUIT & STEEL DUCTS

Tools Needed









PPE Needed









3 pd. Hammer, 2" chisel, Rotary Cutting Tool & Blade, Micarta protective "half moon"

FR Coverall, Class 0 kV Gloves, leather gauntlets, safety glasses, face shield and helmet

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MAKING A WINDOW IN HDPE



Visualize top of duct bank, remove excess concrete chips & dirt.

Have line of site for sections to be removed



Use a rotary cutting tool to score a window In the HDPE pipe top.

Do procedure slowly and carefully.

Only score 90% of the way through the conduit.



Use hammer & chisel to cut away remaining plastic

Strike away from center toward sides. Never strike straight down.



Insert Micarta "half moon" protection board.

Slide horizontally into conduit. Continue to cut open the top of conduit to desired length, Moving the Micarta as you go.

Do each duct individually,

Do not lose your line of sight.

1

2

3

1

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MAKING A WINDOW IN METAL CONDUIT



Visualize top of duct bank, remove excess concrete chips & dirt.

Have line of site for sections to be removed



If you find a coupling connecting two Sections of metal duct, slide collar over, or cut off.

2

There may be a large enough section underneath to insert Micarta protection board for conduit removal.



Use a rotary cutting tool to score a window In the steel conduit pipe top.

Do procedure slowly and carefully. Only score through 90% of steel conduit.

Use chisel and hammer to break away the rest striking away from center toward the corners

3



Insert Micarta "half moon" protection board.
Slide horizontally into conduit. Continue to cut
open top of conduit to desired length, moving
Micarta as you go.

Do each duct individually, Do not lose your line of sight.

4

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NEVER USE THESE TO FIND ELECTRICAL OR GAS FACILITIES









Never use a pickaxe

Never use a backhoe Bucket, or ramhoe attachment by electric of gas facilities Never use a sharp digging Bar. Use blunt edge bar in a sideways motion – never Never use a jackhammer to break out ducts, or use in the vicinity of a gas main or service.

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QR Code for Video



Breakout Conduit

players.brightcove.net



Breakout Conduit (Spanish subtitles)

players.brightcove.net

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Breaking Out Conduit Video -

https://players.brightcove.net/6012566853001/default_default/index.html?videoId=6283610511001

Appendix B – PI Check Point Tasks

Public Improvement (PI) - Check Point Tasks

A PI Check Point Task is defined as a construction activity involving Con Edison facilities that warrant a briefing or discussion with the PI Representative and the Municipal Contractor. This briefing should be documented by the Municipal Contractor in accordance with the applicable sections of the PI Guideline (CONST-029) and OSHA.

| Work Category | Task | | |
|--------------------------------|---------------------------------------|--|--|
| Demolish Manhole (MH) | Inspect MH | | |
| | Build False Roof | | |
| | Remove Forms | | |
| | Demolish Walls | | |
| | Demolish MH Floor | | |
| Build MH | Install Forms | | |
| | Remove Forms | | |
| Wingback | Inspect Site | | |
| | Break Out Conduits / Duct Systems | | |
| Excavation | Reivew Mark-Outs | | |
| | Excavate | | |
| Backfill | Backfill Facilities | | |
| Roadway Restoration | Mill, Pave and/or Reconstruct Roadway | | |
| Electric Pipe Install | Install Conduit or Duct Systems | | |
| Structure POE's | Inspect MH or Service Box (SB) | | |
| | Move Cable(s) | | |
| MH or Service Box (SB) Regrade | Inspect MH or SB | | |

[special specs go here. Section C may be a separate PDF]

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

SANDHWSIB

CONSTRUCTION OF STEEL SHEET PILING IN HUGENOT BOROUGH OF STATEN ISLAND

| COMPANY NAME | CONTACT NAME | CONTACT# | EMAIL |
|--|------------------|--------------|--------------------------------|
| The Consolidated Edison Comany of New York, Inc. ("Coned") | Dennis Brady | 917-668-3435 | BradyD@coned.com |
| Verizon New York Inc. ("Verizon") | Aubrey Makhanial | 516-284-1033 | Aubrey.n.makhanial@verizon.com |

CONTACT NAME CONTACT#

COMPANY NAME

[Utility contact lists go here. Section D may be a separate PDF]

END OF JB-PAGES SECTION D (NO FURTHER TEXT ON THIS PAGE)

SECTION E. PRIVATE UTILITIES SCOPE OF WORK

JOINT BID WORKSHEET

SANDHWSIB - FOR THE CONSTRUCTION

OF ROADWAY IMPROVEMENT IN

HUGUENOT AVENUE, ETC.

BOROUGH OF STATEN ISLAND

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE FOR VERIZON

| JOINT BID
ITEM
NUMBER | DESCRIPTION | Unit of
Measure | Estimated
Quantity |
|-----------------------------|-------------|--------------------|-----------------------|
| JB 351 | EACH | 2 | |

VERIZON JOINT BIDDING SCOPE OF WORK SUPPORT & PROTECTION SANDHWSIB - FOR THE CONSTRUCTION OF ROADWAY IMPROVEMENT IN HUGUENOT AVENUE, ETC.

BOROUGH OF STATEN ISLAND

JB 351 INSTALL AND REMOVE "A" FRAME ON UTILITY POLES

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE

2
Total quantity for JB 351 = 2

END OF JB-PAGES SECTION E (NO FURTHER TEXT ON THIS PAGE)

SECTION F. PRIVATE UTILITIES TEST PITS AND SKETCHES

END OF JB-PAGES SECTION F (NO FURTHER TEXT ON THIS PAGE)

SECTION G. PRIVATE UTILITY DRAWING LIST

UTILITY DRAWING LIST

CONEDISON:

| JB-UI | 1 |
|--------------|------------------------------|
| | · · |
| -U2 To JB-U3 | 2 |
| U4 To JB-U5 | 2 |
| | -U2 To JB-U3
-U4 To JB-U5 |

VERIZON:

| DRAWING TITLE | DRAWING NO. | NO. OF SHEETS |
|---------------------------|-------------|---------------|
| OVERHEAD MAIN LINE PLAN 1 | JB-U6 | 1 |
| | | |
| | | |

Total number of drawings attached are SIX(6) between ConEdison and Verizon.

[Utility Dwg List goes here. Section G may be a separate PDF]

END OF JB-PAGES SECTION G (NO FURTHER TEXT ON THIS PAGE)

. DATE SERVICE SERVIC M PROJECT DOCUMENTS

1. THE SEET OF HUMP PROMISES TOCKING WITH HE CONTRACT AND METTER UTILITY SECURIODISE.

2. IMPRICES WITH LORGINET DOCUMENTORY BY WHICH LL CONTRICT WARKS YOUL VILLUE.

2. IMPRICES WITH HUMPING DOCUMENT CONTRACTORY SHALL RECENT HUTH HAVE 8 FAUTES

FINAL HE (HUMP OPRIVING TALE REPRESENTANCE, ALL RECONANCES OF SHALL BE S A CHI DERNI STEM SECONDINI 12 LIVER REDENI B. CHI DERNI RECHARDA MANUL L'IDER RECONI C. CHI DERNI RECHARDA SECONDINI NO. 117. LIVERI D. CHI DERNI M-CHIET LEVE-AD-310, DETE, 1971. — NAMOLIS C. BELL SPELLI M-CHIET LEVE-AD-310, DETE, 1971. — NAMOLIS IN C. BELL SPELLI M-CHIET LEVE-AD-310, DETE, 1971. — NAMOLIS IN C. BELL SPELLI M-CHIET SECONDIS NO. DIAMBOLI SE DIAMBOLI DE CANTROL CONDENS AND CHIENCEN AND PORTOR AND PORTOR CANTROL PROCESS AND CHIEF AND PORTOR CHIEF. THE FOLLOWING SPECIFICATIONS ARE AVAILABLE FOR CONTRACTOR REVIEW WITH THE DOC. ALL UTLITY WWW PREVIOUS HE CONTRUCTOR SHALL CONTROL TO THE STANDARS AND SECRETAINOR OF THE APPLICABLE CHINT CONTROL OF THE APP LOCABLE CODES AND STANDARDS
WERE DOCUMENTS WE REFERENCED IN THE GENERAL MID/OR DESIGN NOTES THEY SWALL BE THE
LATEST EDITIONS, UNLESS OTHERWISE NOTED. OUTSIDE OF JA 100 SPECIFICATIONS, ANY SUPPORT DESCH REQUIREMENT SWILL BE PROMBED BY THE CITY CONTRACTION AND APPROXED BY THE PROMITE FACILITY OPERATIONS.

WICH OF THE PROMITE FACILITY OPERATIONS. WIT ROUSES FOR ADTIONAL AND/OR MODPOCHES TO THE MANDRAWCE AND PRINTEDING OF TWATE (AND) PAM, FOR HE PROME TIMENS, SAUL ROUMER THE APPROME OF THE RESIDEN DEBUSES HIS CONSULTATION WITH HE FACILITY OPERATION, MODERATORISES ROUMED TO PERFORM HE THE ADMICTATION THE AND HE SAULT OF WAYER, REPORT OF MESS EMPLASION HE THE CORNINCY WITH TANK HE CONSULTATION IN THE COSTS ASSOCIATION WITH THE APPLICABLE 45 CORNINCY BIN TOWN. COSI HAUTIN ORBINGS SHALL ROMONER SECTIONS AT THE MONTHS SHALL ORBINGHES AND ASSESSMENT OF CONTROLLING SHALL ORBITAL SHALL ORBIT IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE PROPER SACRAMO, AND BACKHO DURING CONSTRUCTION WHEREVER AND MERCHER AND INSERTION NUMBERS, WITH SHALL NOT BE REJAYED AS LOWIC AS REQUIRED FOR SAFETY AS DIRECTED BY THE RESIDENT EMPIRES. THE CONTRACTOR WILL ACHERE TO ALL CODE 753 REQUIREMENTS PROR TO PERFORMING ANY EXCAVATIONS. Meny Interpretating 18 minns of at the lumb of the proposed city trends, the contraction sour about the systems extend, subject to the approximate the facility operation with the resident cambers. All thems same performed improving resonant the receipt of the (PLILITY FACILITIES AND SPALL BE DONE IN ACCORDANCE WITH AS 1335E AND ALL SPETY SEMEMBERS AS DIRECTED BY THE FACILITY DEPROVING. ALL PRIME UTILITY FACILITY WARK (SIMPRIET, PROTEZIONA, REMONAL) ASSOCIATED WITH THE HEW YORK CITY TRANSET MUTHORY POPTION OF THIS PROJECT SMALL BE PAID DIRECTLY BY THE TRANSET ANTHORITY AND NOT THE PRIME UTILITY FACILITY OPERATIONS. I ARAS, WEST CONSTILL UNCLOSMAN PREVENTIONES DEST, HE CIT RECORT UN FESCO PER PROPERTY UNCLOSMAN PROPERTY OF THE PROPERTY OF T PRINT NAME THE ENSY THAY CRITAN DETAILS OF CONSTRUCTION ARE NOT ITLLY SHOWN OR HETD ON DOMININGS. NISTRICTION SIMLL BE OF THE SAME TYPE AS FOR SHULAR CONDITIONS THAT ARE SHOWN OR NOTED, BLACT TO THE APPROVAL OF THE FACILITY OPENIORA REPREZENTANCE, MID RESIDENT DEGREER. AUTHORIZED
REPRESENTATIVE SIGNATURE SIGNATURES ALLHORIZED NT RESTORMON FOR ARY COM EDISON WORK PERFORMED OUTSIDE THE CONTRACT LIMITS, SHALL BE WELD IN ACCIONANCE WITH THE REQUIREMENTS OF THE CONFERMENTIA, JUFFLORITY HAWAS JURISDICTION PREFUGALE BIO TIES ADJOK, ACOCA, AND A 4.0440 AS DIFECTED BY THE FRALITY OPERATOR IN JATION WITH THE RESIDENT ENGINEER. —SAINC USES LE WITH OR WITE LUTTS OF THE PROPOSED MASS EXCHANGE, THE COMPANION PROFILE COMPANION THE CONTROLLED WITE SUPPORT OF THE GUE-CASTICE LUTES. THE SUPPORT OF THE GUE-CASTICE LUTES THE CONTROLLED OF THE SUPPORT SETELS, WHICH ARE SUBJECT TO THE APPROVAL OF CONTENSION, INCLUDED IN THE 48 ATOL TIBLE. GENERAL NOTES AND CONDITIONS DEPARTMENT OF DESIGN + CONSTRUCTION ROHAN O, ECCLES Rohan O. Eccles 12/07/2022 HOSS J. WEINTRAUB 外代本 BY APPRO DIVISION OF INFRASTRUCTURE 12/07/2022 DATE PRINT NAME SIGNATURES WILHORIZED ALLINOSE SALIVIDAS SERVITAS I. THE COMPACTION EPHOLITY ASSUMES THAT REPORTED THAT AND ALL MONTHAY COSTS.

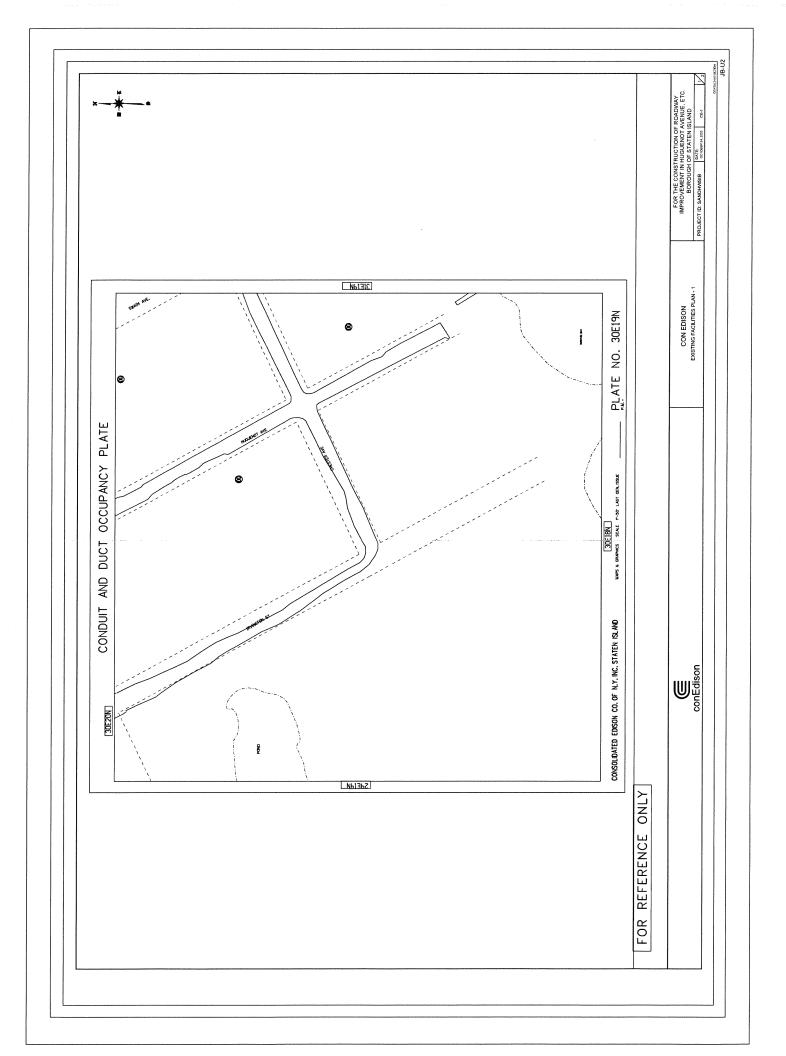
III. CHECKED IF HE CONSOLS TO MONOT THE SEASON FOR ANY THAT THE CONSOLS TO MONETH AND THE CONSOLS THE FORTH CONSOLS HE OPERATION HIS THE RESIDENT FORMERS.

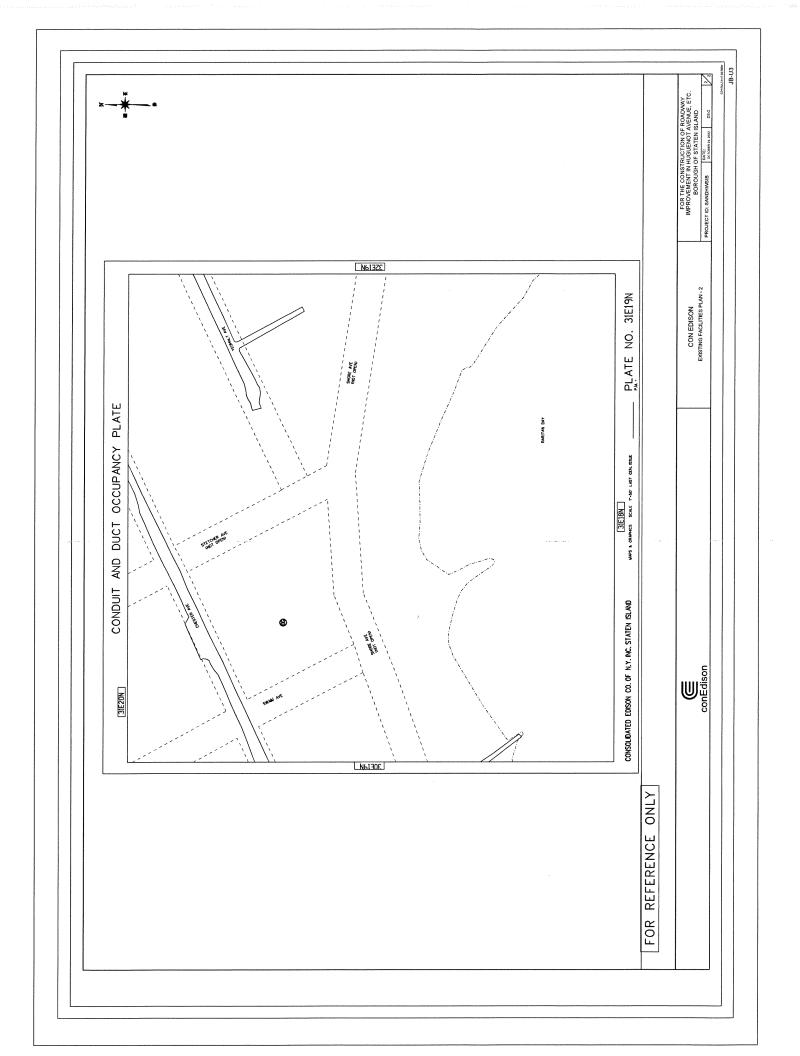
12. LUTIMATE SEASONESS IN A HAPE ON THAT, HE CONSOLS THE APPRICAL, IF PROPOSED BY THE COMPACTION IN MOTING, TO THE FACILITY OPERATIONS AND THE RECORDER DESIGNATION. CALUMINE CONTRIGATION SECURIORIS MITTIS ARE TISSEED TO SEMPLATION THE CONTRICT COCUMENT TO STATE OF THE COCUMENT TO STATE OF THE CONTRICT COCUMENT TO STATE OF THE CONTRICT COCUMENT TO STATE OF THE COCUMENT TO STATE Studence of Lyout New Yor Prince of the Keyllians office independent swil be southern schools and province from the Keyllians country and province from the Decent independent. THE CONTRACTOR SMALL PREVIOUS MODIFICATIONS TO DISSING UTILITY FACILITIES AND/OR STRUCTURES TO FAMOLOGIE FIN HIS UTILITY FACILITIES IN ACCOMMENCE WITH THE COMPANIED MODIFICATION OF THE FACILITY FORWARDS AN ACCOMMENTATION OF THE FACILITIES OF ACCOMMENDED MODIFICATION OF THE FACILITIES OF ACCOMMENDED WITH THE CONTRACT COCCURRENCE. CS, TILE WHIST CHEE, FOR MIC CHE THE COMPLICITE SET DESTRUCTION WITH THE RESERVED FRONTED HE COMPLICITE SHOULD EXTEND AN OFFICE AND THE COMPLICITE SHOULD EXTEND AN OFFICE SHOULD HE SHOUL MINES PROPOSALE, MO AS DISCIDE OF THE FACILITY ORDINOSE A CONSLITION WITH THE RESCORD FORMER, THE COMPRICATE SHALE IS PROPRIED TO INSIGH, THE COT WHISE MANS, COTE ASMS, COTES DAVID CONFIDINGS, SERES, SERES MANDELS, MO OTHES OTT CONFIGUR WITH THESE ASMS, APPLIED MANDELS THE CONFIDENCE AND THE MASS DECENSION, CALL IT HE MASS DESCRIBED THE COMPLET AGAINST THE SUBJECT THE MASS DESCRIBED THE COMPLET AGAINST THE CONFIDENCE AND THE MASS DESCRIBED THE COMPLET AGAINST THE CONFIDENCE AND CONFIDENCE AND THE MASS DESCRIBED THE COMPLET AGAINST THE MASS DESCRIBED THE COMPLET AGAINST THE MASS DESCRIBED THE CONFIDENCE AND THE MASS DESCRIBED THE MASS DESCRIBED THE CONFIDENCE AND THE MASS DESCRIBED THE THE CONTRACTOR SWALL REJOKE THE DISTING SLIFFACE AND BUCK PARDLENT FOR A WIDTH OF READWAY SECRETS IN THE WIT FLANS. CITY CONTRACT BO TIDES, FOR THIS WORK, SWALL APRAY, AS DICOLOMETED, THE CONTRACTOR SWALL REJOKE ABMICONED TROLLEY TRACES, INCLIDING YORGS AND OTHER APPRIREDWINESS. THE WAS CHRANTON AND CHARGED IN ACCORDANCE WITH THE CHARGED IN ACCORDANCE WITH THE CHARGED IN ACCORDANCE WITH THE MARTICANCE AND PROTECTION OF TRAFFIC (JUT) PLAKS. THE COMMENTS SHALL RECOGNISHED WITH THE WITH TAMES CHANCEN AS THE COMMENTS SHALL RECOGNISH SHA ANTION SCURDICHE TOR PRANTE UTILITY FALLITIES AND CITY MORK WITHIN THE ABOVE RETERBACED PROJECT PROVE TO MASS DOMINATE, THE CONTRACTOR SHALL CODGINATE WITH ALL ITLITY FALLITY DEPONITIES AND APPLICAGE. CITY MASS LIGHTORY (MICHAEL) ERIALLS

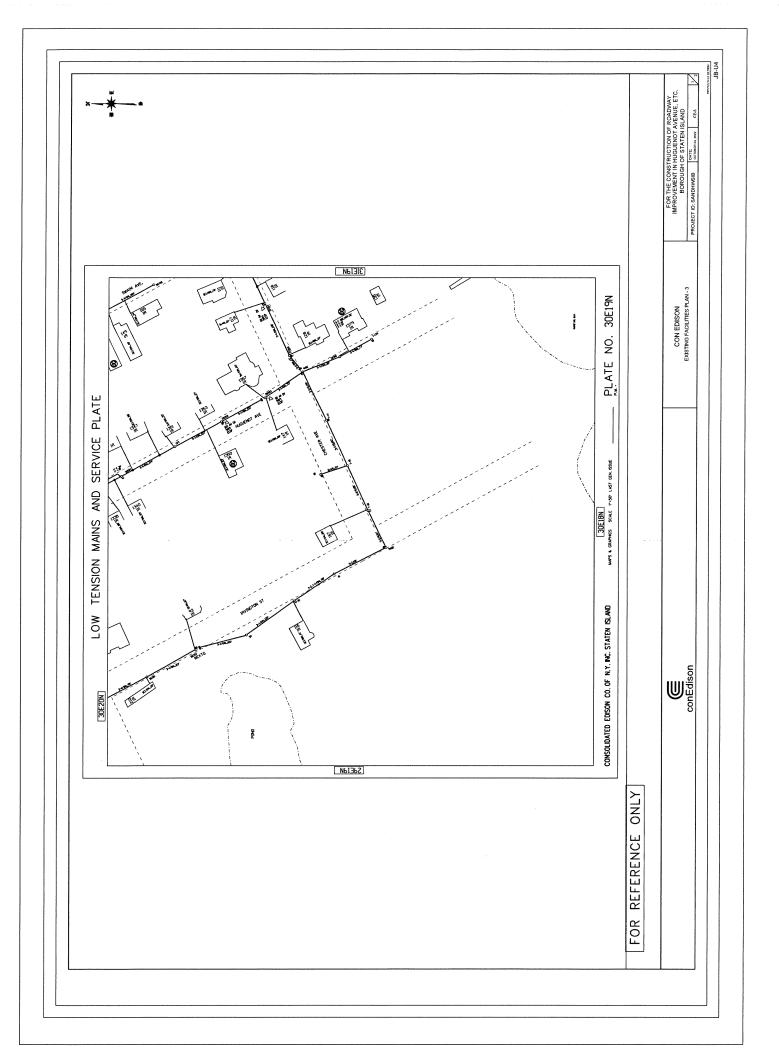
ETRIALS SHAUD BY THE FACINY OPENINGED SHALL BE DELIVERED FREE ON BOMO (FAIA).

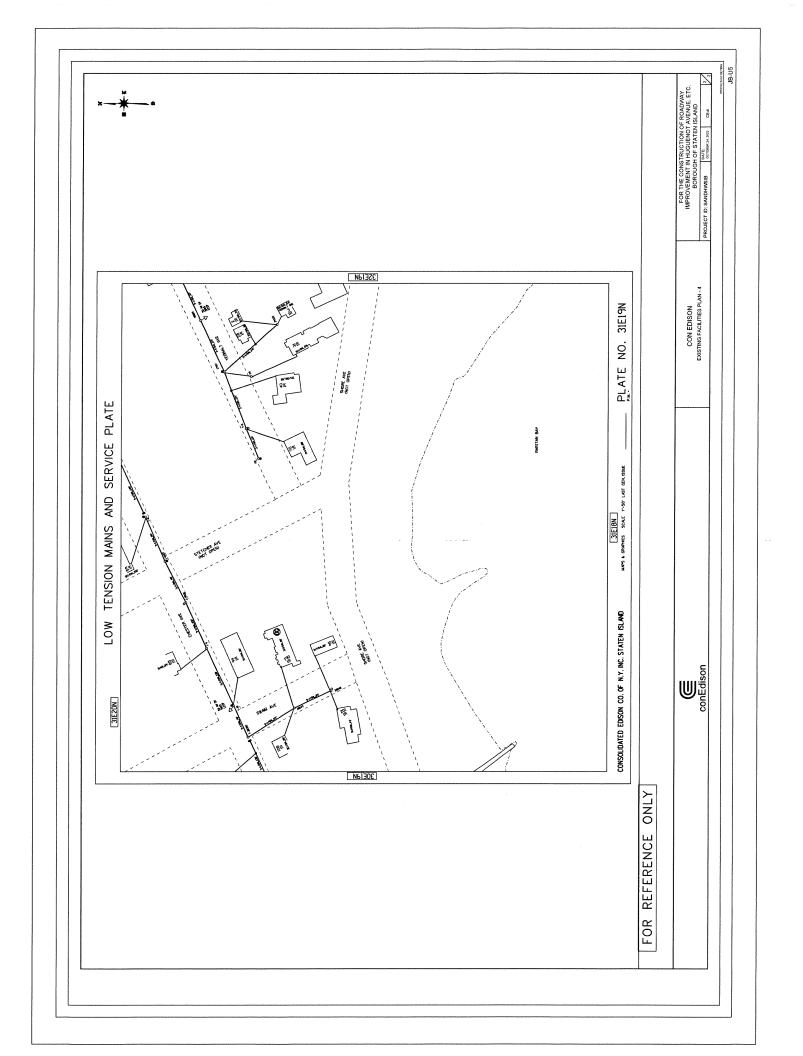
ALL MERSULS SHAUDED LOCKONS, IT SHALL THEN BE THE CONTRACTOR'S RECORDERATION OF DEPORT BY THE FALL THE PROPERTY BECAUSED IN THE FALL THE PROPERTY BY THE RECEIPT OF THE PROPERTY BY THE PROPERTY BY THE RECEIPT ON THE PROPERTY BY THE RECEIPT ON LOCKONS OF THE PARTY BY THE PROPERTY BY THE RECEIPT UNLIADA UNIT (SEPT) THE QUARTITIES OF HEROL COMPLETION OF THE INSTALLATION OF THE UTILITY WORK, THE CONTRACTION SWALL BACKFILL COMPACT AND INSTALL TRAPORARY PARAMENT AS DIRECTED BY THE FACILITY OPERATION IN CONSILLATION WITH THE RESIDENT CHANGES. THE COMPACTOR SML HANGE EXISTING CORRUPTIONS, MALIDINE BET HET LANDE TO RETIRE AND AUMORADE DOSTION FACILITIES AND SIRMINITIESS, ARKILLARIN OF THE REW HILLY NOATHER, COPE MONES, CHIT CONNECTIONS, WATER MANK, ETC. THE REDOW, AND RECOGNIZION WERE SMALL BE COMMON DEMPERATION. HANGE MONE TITLE AND SMALL BE COMMON THE TEXT FOR PROPERLY CARE. AND CAN EXCOME REPRESENTANCE, MY CONSISTENCY WITH TEXT SMAPL COMMON CONSISTENCY WITH THE CONSISTENCY CONSISTENCY WITH THE CONSISTENCY CONSISTENCY. ENMONES. AT CISTA VESCONIDE SANT BE BICTINED IN THE NAMPORALE HE LIDAY, NO THE APPROAGNE ENGLINE SANT BECHNEN SANT AND METHOD WITH BUT BOTHER AND ADDITION OF DESCRIPTION OF THE APPROAGNE ENGLINE SANT BE CORRECT AND THE APPROAGNE ENGLINE SANT BE CORRECT AND THE APPROAGNE ENGLINE SANT BE CORRECT AND THE APPROAGNE AND T IT SHALE IN COMPLICIES RESPONSENT, TO RESET, HUDU AND ERROY THE CHAPTERS OF FURNISHED STRUMEN MERCHALL MANDRILL FOR DELIVER AND ADDRESS HE FOUR CHAPT AND ADDRESS HE FOUR CHAPT AND ADDRESS HE FOUR OFF THE FOR CHAPT AND ADDRESS. THE FOUR OFF THE FOUR CHAPT HE COMPLICION'S MOSCITION AND ACCUSING. ALL ASSOCIATED COSTS ARE COLLED NATURED IN THE APPLICABLE LOSS OF THE FOUR ADDRESS. AND ADDRESS DATE CONSTRUCTION SEQUENCE NOTES GENERAL NOTES AND CONDITIONS PROJECT ID: SANDHWSIB I HE REQUIRED TO ACCOUNTS HALL MILITY SECULAT WORK, WHOLE SHALL BE REPORTED BY HORSE REDUIT IN HER HOLD THE REPORT HAS THE REP SPECIALTY WORK MAICH SIMIL BE PEDPODALED BY THE FACILITY OPERATOR(S) OR OTHERS HIRED BY THE FACILITY OPERATOR(S) SMILL RACLUES BUT IS NOT BE LIMITED TO: THE LEAR, AND INVESTED ACCESS TO ILL COS DESCRIPTIONS LEAVED RECEIVE AND ALTER CONTROLLS WAS TO SEE EXPLANATION.

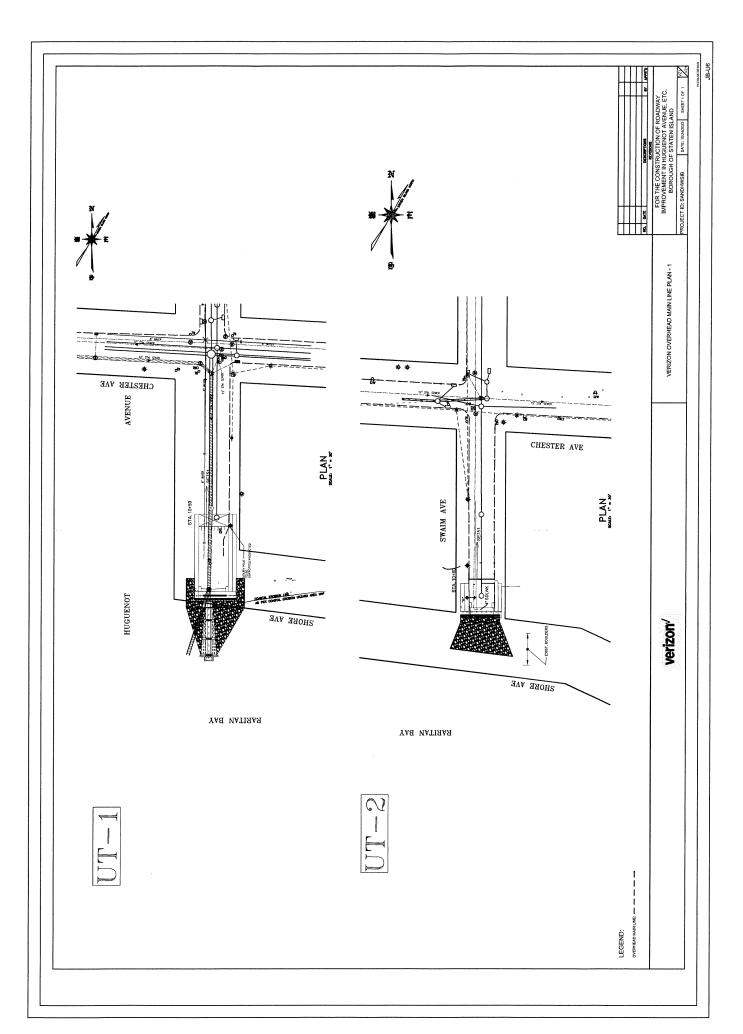
CONTROLLS WAS TOWNED ACCESS TO THE SET, CONTROLLS WAS TOWNED EXPLANATION FROM ACCESS TO THE SET, CONTROLLS WAS TOWNED ACCESS TO THE SET, CONTROLLS WAS TOWNED ACCESS TO THE SET, CONTROLLS WAS TOWNED ACCESS TOWNED ACCESS TO THE SET, CONTROLLS WAS TOWNED ACCESS TOWNED REMARK ALL SECONDAY, RESEA THE COMPACTION IN SECONDAY LOCATIONS WHERE THERE IS A TRANSITION OF CABLE SYSTEMS FROM OFERHED TO INCOMPACTION. THE CONDUCTIONS ARE INSULATED AND HOUSED IN CONDUIT, CONTRACTOR REPESCANSE, AND EQUIPMENT ARE TO MODE CONFACT WITH THESE FACILITIES. compactor personnel and equipadit saall maintan a 10 peet clearance from the clessest secondary conductor, Unless approved conductor protection is installed and a 3 feet annului clearance can be obtained. ATTACACIO SI STATI TIERE SALVENI ENTE SALVENI ENTE SALVENI ENTE SALVENI ENTE CA GOVI GITTERIA PROPERE SALVENI ENTE CA GOVI GITTERIA PROPERE SALVENI ENTE SALVENI sheyh Comung adsonaet nad Egidheri. Sant malan a namana genaaac oo 3 leel laga agee kactiest Nethuld in Redigonol-Jule (net arch is insultad on a ressouls are wan nac v gognoed delen altatat One (doom med laitze yn year (net 80.01) had gesples y bandan a tamban gesples en seel seel eisensynt WY CHETRÓN ADUT HE KINEK, TYK, YAZIAK AND LOCATON OF BERGEZO JORRÁN D KETTIKAL NIE SERMANT MENN HE KEZARPANCH, UNITS OF A NOZOE PROLET MANS JEWAL NE ROZETU D TIA, KAIMONZO DAN DERM SERESZARIAK, UNITA HO CRELASHAKE SHUL HE CONTRUCTON RE FRANTED TO CHARCET ON TE OFTEN THEN UTILITY MELE AND MENS, SALO NE TELEPHOL, CHELE TWA DE RE ANAM, ET ON DESCAN OGREBO FACILITY. al Cable Work — EX. Placing, Splicing, Verification of UNE/Dead Facilities, Failures, etc. — Swall be performed by Verizon Temants. AND AND THE TELEPHONE CHOICE ARE NOBULLY FOUND ON POLES ABOVE THE TELEPHONE CHOICS AND CHIE ON MINES NET PROMIC POHER TO COSTIGUES SERVEZ POINTS THROUGH SERVEUL COSPIGURATIONS THAT MAY CONSIST OF MINES ON MULTIPLE CHOOCHERS, STREETLIGHTS AND INSPERS COMPAGE. AZERNA GAZERAD ELETREK, EGERBAIDA SETEMA IZERRAT GOMEKKO ELETRE GROBERION STEPLE CHOSENS AF THO NATING CLASSFORMS, RHIMEY AND ECONOMIN IZER. HE PAMMEY STEPL MC, KONTACS HE DIZESS OF 2000 KN.TS BETRESS AFF SHALL CONDUCTOR AND GROWN, A KALDER ERPEDINAL GROUPET THAN 4,000 MAIS BETRESS AFF BRE OKONOMICROS, THE SECONOMY STEPLE MC AND HANGE THAN 170 TO 477 MAIS. FOR THE CONSTRUCTION OF ROADWAY IMPROVEMENT IN HUGUENOT AVENUE, ETC. BOROUGH OF STATEN ISLAND SHEET 1 OF 1













DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN

VOLUME 3 OF 3

PROJECT ID: SANDHWSIB

RECONSTRUCTION OF SEGMENTS OF HUGUENOT AVENUE/SWAIM AVENUE INCLUDING SEWER, WATER MAIN WORK

Together With All Work Incidental Thereto BOROUGH OF STATEN ISLAND CITY OF NEW YORK

| | Contractor |
|-------|------------|
| Dated | |