

Department of Design and Construction

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

30-30 THOMSON AVENUE

## VOLUME 1 OF 3



## BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR: PROJECT ID: HWR100PAD

HYLAN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK

FOR THE DEPARTMENT OF TRANSPORTATION PREPARED BY GANDHI ENGINEERING INC.

DECEMBER 1, 2015

## Bid Tab

Description
*Revised*

| Bid Date | 2/19/2016 | FMS ID | HWR100PAD |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  | DOT |
|  |  | Client Agency |  |
| Estimated Cost | \$3,790,925.15 |  | NO |
|  | Not less than $2 \%$ of Total Bid Price | PLA | Giovanni Matos |
| Bid Security |  | Contract Manager |  |
| Time Allowed | 365 CCD |  | Lebron, Geraldo |
|  | 3 | Project Manager | 85016B0085 |
| Addendum | 8502016HW0013C | E-PIN | Gandi Engineering, |
| PIN |  | Consultant | Inc. |

Selective Bidding
HYLAN BLVD BUS PADS FOR SELECTIVE BUS SERVICE BOROUGHS OF BROOKLYN AND STATEN ISLAND

FMS ID
Client Agency
PLA

Contract Manager
Project Manager
E-PIN
Consultant

Giovanni Matos
Lebron, Geraldo 85016B0085 Gandi Engineering, Inc.

Bid Amount

$$
\$ 4,329,914.50
$$

Bid Rank

1 GAZEBO CONTRACTING INC
ACME SKILLMAN CONCRETE 2 CO. INC.

3 PERFETTO CONTRACTING CO. 3 INC.
4 NY ASPHALT INC
5 TRIUMPH CONSTRUCTION CORP.
6 C.A.C. INDUSTRIES, INC.
7 HUICATAO CORP
Recorder: Brenda Barreiro Ext 1041 Approver:

Department of Design and

Charlette Hamamgian, Esq Agency Chief Contracting Officer

Lorraine Holley
Deputy ACCO
Competitive Sealed
Bid Contracts

May 20, 2016

CERTIFIED MAIL - RETURN RECEIPT REQUEST
Gazebo Contracting Inc.
$3-0226^{\text {th }}$ Avenue
Astoria, NY 11102
RE: FMS ID: HWR100PAD
E-PIN: 85016B0085001
DDC PIN: 8502016HW0013C
HYLAN BLVD BUS PADS FOR SELECTIVE BUS SERVICE - BOROUGHS OF BROOKLYN AND STATEN ISLAND NOTICE OF AWARD

## Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of $\$ 4,329,914.50$ submitted at the bid opening on February 19, 2016. Within ten (10) days of your receipt of this notice of award, you are required to take the actions set forth in Paragraphs (1) Conditions to below. For your convenience, attached please find a copy of Schedule $A$ re required for this contract.
the Contract, which sets forth the types and amounts of
(1) Execute four copies of the Agreement in the Contracts Unissioner of Deeds will be available to Long Island City, New York (IDCNY Bulding). Agreement must be signed by an officer of the witness and notarize your sign.
(2) Submit to the Contracts Unit four properly executed performance and payment bonds. If required for this contract, copies of performance and payment bonds are attached.
(3) Submit to the Contracts Unit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disabity benefits, as required by New York State Law. The insurance documentation specified in this paragraph is required for registration of the contract with the Comptroller's Office.

On or before the contract commencement date, you are required to submit all other certificates of insurance and/or policies in the types and amounts required by Schedule A. Such certificates of Insurance and/or policies must be submitted to the Agency Chief Contracting Office, Attention: Risk Manager, Fourth Floor at the above indicated department address.
Your attention is directed to the section of the Information for Bidders entitled "Failure to Execute Contract". As indicated in this section, in the event you fail to execute the contract and furnish the required bonds within the (10) days of your receipt of this notice of award, your bid security will be retained by the City and you will be liable for the difference between your bid price and the price for which the contract is subsequently awarded, less the amount of the bid security retained.


PROJECT D: HWR100PAD
HYLA BOULEVARD

## BUS PADS FOR SELECT BUS SERVICE

## INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

> Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK

Name of Bidder: Gazebo contracting InC
Date of Bid Opening:

## 2/19/2016

Bidder is: (Check one, whichever applies) Individual () Partnership () Corporation $(\mathbb{X})$
Place of Business of Bidder: $\qquad$
Bidder's Telephone Number: $718-728-1770 \quad$ Fax Number: $718-278-4074$
Bidder's EMail Address: in FO@ gazebocontraoting. com
Residence of Bidder (If Individual): $\qquad$
If Bidder is a Partnership, fill in the following blanks:
Names of Partners

> Residence of Partners

If Bidder is a Corporation, fill in the following blanks:
Organized under the laws of the State of $\qquad$
Name and Home Address of President: Salvatore Filinger'
$18-1027$ Ave, Astoria N. y 11102
Name and Home Address of Secretary: Bane de tho E' linger:
10 Greenknoll os, Fort salonga N.y. 11768
Name and Home Address of Treasurer: Bene detto Flinger.
10 Geenknoll ct, fort salonga Ny liger

| CITY OF NEW YORK |
| :--- |
| DEPARTMENT OF DESIGN AND CONSTRUCTION |$\quad$ C-1.



The above-named 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 page $\mathrm{C}-6$ of this Bid Booklet.

The bidder hereby affirms that it has paid all applicable City income, excise and other taxes for all years it has conducted business activities in New York City.
5. 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 herein shall mean the individual bidder, firm, partnership or corporation executing this bid).

## BID FORM

PROJECT ID. HWR100PAD
TOTAL BID PRICE: In the space provided below, the Bidder shall indicate its Total Bid Price in figures. Such Total Bid Price is set forth on the final page of the Bid Schedule.

TOTAL BID PRICE:
( $\mathrm{a} / \mathrm{k} / \mathrm{a}$ BID PROPOSAL)


BIDDER'S SIGNATURE AND AFFIDAVIT

Bidder:
Gazebo, contracting Inc.

By:


Attest:
Secretary of Corporate Bidder
(Corporate Seal)

Affidavit on the following page should be subscribed and sworn to before a Notary Public

## BID FORM (TO BE NOTARIZED)

## AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

$\qquad$ ss:
I am the person described in and who executed the foregoing bid being duly sworn says: respects true.

Subscribed and sworn to before me this
(Signature of the person who signed the Bid)
$\qquad$ day of $\qquad$ , $\qquad$

Notary Public

## AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP

STATE OF NEW YORK, COUNTY OF $\qquad$ ss:
I am a member of $\qquad$ the firm described in being duly sworn says: bid. I subscribed the name of the firm thereto on behalf of the firm described in and which executed the foregoing respects true.

Subscribed and sworn to before me this
(Signature of Partner who signed the Bid)
$\qquad$ day of $\qquad$ , $\qquad$

Notary Public

## AFFIDAVIT WHERE BIDDER IS A CORPORATION

STATE OF NEW YORK, COUNTY OF QueenS $\qquad$ Benedetto Filingeri of the above named corporation whoring duly sworn says: executed the foregoing bid. I reside at $\qquad$ Fort SAlonga I have knowledge of the several matters th

## Subscribe

d and sworn to before me this
 day of $\mathcal{F} / 2$
brassica todorovic
Notary Public, State of New York Registration \#01T06046969 Qualified in Queens County My Commission Expires Aug. 21, 2

## AFFIRMATION

## PROJECT ID. HWR100PAD

The undersigned bidder affirms and declares that said bidder is not in arrears to the City of New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except: $\qquad$
(If none, the bidder shall insert the word "None" in the space provided above.)

Full Name of Bidder:

## Gazebo contracting Inc

 Address: 3-02 26 AvenueCity $\qquad$ State $\qquad$ \%._Z Zip Code $\qquad$
CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

## 1 A - Individual or Sole Proprietorship* <br> SOCIAL SECURITY NUMBER

B - Partnership, Joint Venture or other unincorporated organization
1 EMPLOYER IDENTIFICATION NUMBER EMPLOYER IDENTIFICATION NUMBER


If a corporation, place seal here
This affirmation must be signed by an officer or duly authorized representative.
*Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying of businesses which seek City contracts.
(NO TEXT ON THIS PAGE)

## BID SCHEDULE

## NOTICE TO BIDDERS

Items listed in this Bid schedule which have one (1) digit followed by a decimal (e.g. 4.02 CB ) shall comply with the requirements of the corresponding numerical sections of the NYCDOT Standard Highway Specifications as amended by I-PAGES or R-PAGES, herein Volume 3 of 3 .

Items listed in this Bid Schedule which have two (2) digits beginning with the number "5" or " 6 " or " 7 " followed by a decimal (e.g. 52.11D12, $60.11 \mathrm{R} 606,72.11 \mathrm{HF}$ ) shall comply with the requirements of the New York City Department of Environmental protection (NYCDEP) Standard Sewer and water Main Specifications, dated July 1, 2014, as amended by SW-PAGES, herein Volume 3 of 3 .

## BID SCHEDULE


proportionate share of the Bidder's anticipated profit, overhead costs, and orindirect costs, andipat for the performance of the items in question.
(2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers
NOTE:

## 1/19/2016 12:00 AM


B-4
W甘 00:ZL 910Z/6L/L

## PROJECT ID: HWR100PAD CONTRACT PIN: 8502016 HW0013C

 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN BID SCHEDULE FORM| $\begin{gathered} \mathrm{COLH}^{1} \\ \text { SEQ, NG } \\ \hline \end{gathered}$ | TEN NUNBER:GODESGRTHON |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 007 | 4.09 AD <br> STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP) | 15.00 | L.F. | - | - |
|  |  |  |  | 63 | 945 |
| 008 | 4.09 AF <br> STRAIGHT STEEL FACED CONCRETE CURB (27 DEEP) | 2,220.00 | L.F. |  | + |
|  |  |  |  | 67 | 149,850: |
| 009 | 4.09 BF <br> DEPRESSED STEEL FACED CONCRETE CURB ( 27 DEEP) | 110.00 | L.F. | $: 50$ |  |
|  |  |  |  | 82 | 9075 |
| 010 | 4.09 CD <br> CORNER STEEL FACED CONCRETE CURB (18" DEEP) | 70.00 | L.F. | ! | ! |
|  |  |  |  | 125 | 8.750 |
| 011 | 4.11 CA <br> FILL, PLACE MEASUREMENT | 90.00 | C.Y. | 150 | 8,750 |
|  |  |  |  | 62 | 5625 |
| 012 | 4.13 AAS <br> 4" CONCRETE SIDEWALK (UNPIGMENTED) | 11,330.00 | S.F. | :50 | ,6as |
|  |  |  |  | 10 | 118,965 |


B-6

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ficer |  |  |
| 019 | 4.18 B <br> MAINTENANCE TREE PRUNING ( $12^{\prime \prime}$ TO UNDER $18^{\prime \prime}$ CAL.) | 7.00 | EACH | 405 | 2835 |
| 020 | 4.18 C <br> MAINTENANCE TREE PRUNING ( $18^{\prime \prime}$ TO UNDER $24^{\prime \prime} \mathrm{CAL}$.) | 3.00 | EACH | 435 | 1305 |
| 021 | 4.18 D <br> MAINTENANCE TREE PRUNING (24" CAL. AND OVER) | 3.00 | EACH | 531 | 1593 |
| 022 | $4.21$ <br> TREE CONSULTANT | 300.00 | P/HR | 112 | 33750 |
| 023 | 51.23RF <br> REPLACEMENT OF EXISTING MANHOLE FRAME AND COVER | 4.00 | EACH | 1875 | 7,500 |
| 024 | 51.41S001 <br> STANDARD CATCH BASIN. TYPE 1 | 1.00 | EACH | 8900 | 8900 |

## BID SCHEDULE FORM


B-8

| DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN BID SCHEDULE FORM CONTRACT PIN: 85020 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { cols } 19 \\ & \text { sEa. No } \end{aligned}$ |  |  |  |  |  |
| 031 | 6.26 <br> TIMBER CURB | 3,520.00 | L.F. | $12: 50$ | 44,000 |
| 032 | 6.28 AA <br> LIGHTED timber barricades | 690.00 | L.F. | 15 | $10,350$ |
| 033 | 6.28 BB <br> UNLIGHTED TYPE III BREAKAWAY BARRICADES | 220.00 | L.F. | 175 | 4125 |
| 034 | 6.36 DR <br> STRUCTURAL REPAIR AND ADJUSTMENT OF UTILITY STRUCTURES | 11.00 | C.Y. | 1375 | $15 / 25$ |
| 035 | 6.40 B <br> ENGINEER'S FIELD OFFICE (TYPE B) | 18.00 | MONTH | 4375 | 78,750 |
| 036 | 6.43 <br> PHOTOGRAPHS | 320.00 | SETS | 25 | 8,000 |

B-9


## BID SCHEDULE FORM


PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

## BID SCHEDULE FORM


PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE FORM





PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE FORM


B-17


## BID SCHEDULE FORM



| DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN BID SCHEDULE FORM <br> PROJECT ID: HWR100 CONTRACT PIN: 8502016H |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 099 | 8.01 C2 <br> SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES | 6.00 | SETS | 2000 | 12000 |
| 100 | $8.01 \mathrm{H}$ <br> HANDLING. TRANSPORTING ANO DISPOSAL OF HAZARDOUS SOIL | 35.00 | TONS | 437 | 153/2 |
| 101 | $8.01 \mathrm{~S}$ <br> HEALTH AND SAFETY | 1.00 | L.S. | $3 / 250$ | $3 / 250$ |
| 102 | 8.01 W1 <br> REMOVAL, TREATMENT, AND DISCHARGEIDISPOSAL OF CONTAMINATED WATER | 7.00 | DAY | 6250 | 43750 |
| 103 | 8.01 W2 <br> SAMPLING AND TESTING OF CONTAMINATED WATER | 2.00 | SETS | 1500 | 3000 |
| 104 | $8.02 \mathrm{~A}$ <br> SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK | 660.00 | S.F. | 20 | 1650 |

B-21
PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW 0013 C ITY DEPARTMENT OF DESIGN AND CONSTRUCTION
ON OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE FORM



## 



WyOJ ヨ7naヨHOs alg

NOIITn4
CONTRACT PIN：8502016HW0013C
a甘d00LUMH：：al Lכヨroyd
W $\forall 00: \mathrm{ZL} 910 Z / 6 \mathrm{~L} / \mathrm{I}$
$\qquad$
SCHEDULE B - M/WBE Utilization Plan Part I: M/WBE Participation Goals
Part I to be completed by contracting agency

## Contract Overview



M/WBE Participation Goals for Services
Enter the percentage amount for each group or for an unspocified gosl. Please note that there are no goals for Asian Americans in Protessional Senices.
Prime Contract Industry: Construction

| Group | Percentage |  |
| :---: | :---: | :---: |
| Unspecified* | EXEMPT \% |  |
| or |  |  |
| Black American | UNSPECIFIED* |  |
| Hispanic American | UNSPECIFIED* |  |
| Asian American | UNSPECIFIED* |  |
| Women | UNSPECIFIED* |  |
| Total Participation Goals | EXEMPT \% | Line 1 |

[^0]$\qquad$

## SCHEDULE B - Part II: M/WBE Participation Plan

Part Il to be completed by the bidder/proposer.
Please note: For Non-MWBE Prime Contractors who will NOT subcontract any services and will self-perform the entire contract, you must obtain a FULL waiver by completing the Waiver Application on pages 17 and 18 and timely submitting it to the contracting agency pursuant to the Notice to Prospective Contractors. Once a FULL WAIVER is granted, it must be included with your bid or proposal and you do not have to complete or submit this form with your bid or proposal.

## Section l: Prime Contractor Contact Information



Section 11: MWBE Utilization Goal Calculation: Check the applicable box and complete subsection.
PRIME CONTRACTOR ADOPTING AGENCY MIWBE PARTICIPATION GOALS

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

Calculate the total dollar value of your total bid that you agree will be awarded to MWBE subcontractors for services and/or credited to an M/WBE prime contractoror Qualified Joint Venture.

Please review the Notice to Prospective Contractors for more information on how to obtain credit for MNBE participation.

Bid/Proposal $\quad$ Agency Total PRIME CONTRACTOR OBTAINED PART

## PRIME CONTRACTOR OBTAINED PARTIAL WAIVER APPROVAL: ADOPTING MODIFIED M/WBE PARTICIPATION GOALS

For Prime Contractors (including Qualified Joint Ventures and MNWBE firms) adopting Modified MWBE Participation Goals.

Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an MNBE prime contractor or Qualified Joint Venture.

Please review the Notice to Prospective Contractors for more information on how to obtain credit for MMBE participation.

| Total <br> Bid/Proposal <br> Value | Adjusted <br> Participation Goal <br> (From Partial Waiver) |  | Calculated MWBE <br> Participation <br> Amount |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $\$$ |  |  |  |  |

PIN\#: $\qquad$
Section III: M/WBE Utilization Plan: How Proposer/Bidder Will Fulfill M/WBE Participation Goals. Please review the Notice to Prospective Contractors for more Information on how to obtain credit for M/WBE participation. Check applicable box. The Proposer or Bidder will fulfill the M/WBE Participation Goals:

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

As a non MWBE Prime Contractor that will enter into subcontracts with M/WBE firms the value of which is at least the amount located on Lines 2 or 3 above, as applicable.

## Section IV: General Contract Information

What is the expected percentage of the total contract dollar value that you eppect to awardin subcontracts for services, regardless of M/WBE status? \% $\qquad$ -

$\qquad$

## Section V: Vendor Certification and Recuired Affimations

## I hereby:

1) acknowiedge my understanding of the MMWE participation requirements as set forth herein and the pertnent provisions of Section 6-129 of the Administrative Code of the City of New York (Section 6. 1291, and the rules promulgated thereunder:
2) affirm that the information supplied in support of this MWBE Utilization Plan is true and corrects
3) agree, if awarded this Contract, to comply with the MWBE 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 affim that it is a material term of this Contract that the Vendor wil award the total dollar value of the MWBE Participation Goals fo certified MBEs and/or WBEs, unless a full waiver is obtained or such goals are modified by the Agency; and
5) agree and affim, if awarded this Contract, to make all reasoneble, good faith efforts to meet the MMEE Particjpation Goals, or If a partial waiver is obiained or such goals are modified by the Agency, to meet the modified Partipjpation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firns:


## SCHEDULE B - PART III - REQUEST FOR WAIVER OF M/WBE PARTICIPATION REQUIREMENT

## Contract Overview

Tax ID\#
FMS Vendor ID \# $\qquad$
Business Name
Contact Name $\qquad$ Telephone \# $\qquad$ Emall $\qquad$
Type of ProcurementCompetitive Sealed BidsOther Bid/Response Due Date $\qquad$ APT E-PIN \# (for this Contracting Agency: procurement): $\qquad$ MUMTHIN:

MMWBE Participation Goals as described in bid/solicitation documents \%

## Agency M/WBE Participation Goal

Proposed MIWBE Participation Goal as anticipated by vendor seeking waiver
$\%$ of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for services and/or credited to an MWBE Prime Contractor or Qualified Joint Venture.
Basis for Waiver Request: Check appropriate box \& explain in detall below (attach addftional pages if needed)Vendor does not subcontract services, and has the capacity and good faith intention to perform all such work itself with its own employees.

Vendor subcontracts some of this type of work but at a lower\% than bid/solicitation describes, and has the capacity and good faith intention to do so on this contradt. (Attach subcontracting plan outlining services that the vendor will self-perform and subcontract to other vendors or consultants.)

Vendor has other legitimate business reasons for proposing the MANBE Participation Goal above. Explain under separate cover.

Refarences
List 3 most recent contracts perfomned for NYC agencies if any). Include information for each subcontract awarded in performance of such contracts. Addyore pages if kecessarys


CONTRACT NO.
Total Contract Amount
Item of Work Subcontracted and Value of subcontract

## AGENCY

Total Amount Subcontracted

Item of Work
Subcontracted and Value of subcontract

## DATE COMPLETED

Item of Work Subcontracted and Value of subcontract

List 3 most recent contracts performed for other entities. Include information for each subcontract awarded in performance of such contracts. Add more pages if necessary.
(Complete ONLY if vendor has performed fewer than 3 New York City contracts.)


## BID BOND I FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, $\qquad$
Gazebo Contracting Inc.
3-02 26 Avenue, Long Island City, NY 11102
hereinafter referred to as the "Principal", and
Liberty Mutual Insurance Company
55 Water Street-23rd Floor, New York, NY 10041
hereinafter referred to as the "Surety" are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "CITY", or to its successors and assigns in the penal sum of

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

Whereas, the Principal is about to submit (or has submitted) to the City the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for HWR100PAD, Hylan Blvd. Bus Pads for select

```
bus service
```

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said Proposal without the consent of the City for a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's Proposal by the City, if the Principal shall:
(a) Within ten (10) days after notification by the City, execute in quadruplicate and deliver to the City all the executed counterparts of the Contract in the form set forth in the Contract Documents, in accordance with the proposal as accepted, and
(b) Furnish a performance bond and separate payment bond, as may be required by the City, for the faithful performance and proper fulfullment of such Contract, which bonds shall be satisfactory in all respects to the City and shall be executed by good and sufficient sureties, and
(c) In all respects perform the agreement created by the acceptance of said Proposal as provided in the Information for Bidders, bound herewith and made a part hereof, or if the City shall reject the aforesaid Proposal, then this obligation shall be null and void; otherwise to remain in full force and effect.

## BID BOND 2

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

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

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

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

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the $\qquad$ day of $\qquad$ , 2016
(Seal)

(Seal)
Liberty Mutual Insurance Company
By:


## ACKNOWLEDGEMENT OF PRINCIPAL. IF A CORPORATION

State of New York County of Queens ss:
$\qquad$ day of February, 2016 , before me personally came Benedetto Filingeri to me known, who, being by me duly sworn, did depose and say that he resides at Fort salonga N. U. that he is the vice President of Gazebo contracting Inc the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

ACKNOWLEDGEMENT OF PRINCIPAL. IF A PARTNERSHIP
State of $\qquad$ County of $\qquad$ ss:
On this $\qquad$ day of $\qquad$ , before me personally appeared to me known and known to me to be one of the members of the firm of
$\qquad$ described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same as and for the act and deed of said firm.

## ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of $\qquad$ County of $\qquad$ ss:
On this $\qquad$ day $\qquad$ $\rightarrow$ $\qquad$
$\qquad$ to $\longrightarrow \longrightarrow$ be to me personally appeared executed the foregoing instrument and acknowledged that he executed the same.

Individual Acknowledgment
State of $\qquad$ New York

County of $\qquad$
On this $\qquad$ day of $\qquad$ 2016 before me personally came to me known, and known to me to be the individual in and who executed the foregoing instrument, and acknowledged to me that he/she executed the same.

My commission expires $\qquad$
Notary Public
Corporation Acknowledgment

## State of New york

County of Queens
On the 16 day of February, 2016 before me personally came Benedetto Flinger: to me known; who being by me duly sworn, did depose and say that he/she/they resides) in $\qquad$ that he/she/they is (are) the vice President of the Gazebo contracting $\qquad$ , the corporation described in and which executed the above instrument; that he/she/tney knows) the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said corporation, and that he/she/they signed his/her/their names) thereto by like authority.

My commission expires $\qquad$

## Surety Acknowledgment

## State of New York

## County of Nassau

On the 19th _day of February, 2016 personally came Raymond C. Carman to me known, who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Liberty Mutual Insurance Company in and which executed the above Instrument knows) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

My commission expires Notary Public, State of New York
$\qquad$ Registration \#01 LA6076587 Qualified In Nasal County
Commission Exp:

$+8$

## LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT -- DECEMBER 31, 2014



* Bonds are stated at amortized or investment value; Stocks at Association Market Values. The foregoing financial information is taken from Liberty Mutual Insurance Company`s financial statement filed with the state of Massachusetts Department of Insurance.
I. TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true. and correct statement of the Assets and Liabilities of said Corporation. as of December 31, 2014, to the best of my knowledge and belief

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington. this 20th day of


Assistant Secretary

- THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.
Certificate No. 7196351

American Fire and Casualty Company<br>The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company<br>West American Insurance Company

## POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire \& Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Kim Spinello; Tara Laverdiere, D. J. Scotto; Denese Thompson; Frank Abbatiello; Lisa Marrazzo; Louis J. Spina; Philip G. Samiels;
Raymond C. Carman; Theresa A. Lanfranco
all of the city of Uniondale state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 4 th day of December 2015


## American Fire and Casualty Company

 The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance CompanySTATE OF PENNSYLVANIA
ss
By:


## COUNTY OF MONTGOMERY

David M. Carey, Assistant Secretary
$\qquad$ day of December
2015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.
IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.
 COMMONWEALTH OF PENNSYLVANIA

| Notarial Seat |
| :---: |
| Teresa Pastella, Notary Public |
| Plymouth Twp., Montgomery County |
| My Commission Expires March 28, 2017 |

By:


This Power of Attomey is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:
ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.
ARTICLE XIII - Execution of Contracts - SECTION 5 . Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.
Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.
I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full; true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this $\qquad$ day 0 $\qquad$ $20 \quad 16$

By:


Gregory W Davenport, Assistant Secretary

ATTACH TO CONTRACT DOCUMENTS<br>THE CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION INFRASTRUCTURE DIVISION BUREAU OF DESIGN<br>PROJECT ID: HWR100PAD<br>HYLAN BOULEVARD<br>BUS PADS FOR SELECT BUS SERVICE

INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK
Together with All Work Incidental Thereto
BOROUGHS OF THE BROOKLYN AND STATEN ISLAND
CITY OF NEW YORK
ADDENDUM NO. 1
DATED: January 29, 2016

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, Volume 1 of 3;

Delete "REQUEST FOR INFORMATION" in it entirety.
Add the attached "REQUEST FOR INFORMATION" consisting of one (1) rage, following the cover page of the Volume 1 of 3 Bid Booklet.

END OF ADDENDUM NO. 1
By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of one (1) page and one (1) page of attachment.
THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID


MOHSEN ZARGARELAHI, PE.
Assistant Commissioner

ATTACH TO CONTRACT DOCUMENTS
THE CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION INFRASTRUCTURE DIVISION bureau of design

PROJECT ID: HWR100PAD
HYE.AN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK
Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND

CITY OF NEW YORK
ADDENDUM NO. 2
DATED: February 10, 2016
this addendum is hereby made a part of the contract documents

1. For additional information see the attached page of "Questions Submitted by Bidder and DDC's Responses"'.

END OF ADDENDUM NO. 2
By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of one (1) page and one (1) page of attachment. THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID


ATTACH TO CONTRACT DOCUMENTS
THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION BUREAU OF DESIGN

PROJECT ID: HWR100PAD
HYLA BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK
Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK

ADDENDUM NO. 3
DATED: February 17, 2016

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. For additional information see che attached page of "Questions Submitted by Bidder and DDC's Responses".

END OF ADDENDUM NO. 3
By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of one (1) page and one (1) page of attachment.

## Bevedetto E'lingerí <br> Name of Bidder

By: $\qquad$

MOHSEN ZARGARELAHI, P.E.
Assistant Commissioner

## SPECIAL NOTICE TO BIDDERS

Please be advised that there are no M/WBE requirements for this project. However, the Contractor is subject to DBE goals of $11 \%$ in accordance with the requirements of the FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS, Article 29, as contained in Volume 3 of 3 under FTA - PAGES.

# Notice to Bidders 

## Compliance with HireNYC and Reporting Requirements

The Hiring and Employment Rider shall apply to contracts valued at $\$ 1$ million or more for all goods, services and construction except human services contracts that are subject to the Public Assistance Hiring Commitment Rider. The Rider describes the Hire NYC process and obligations, including reporting requirements throughout the life of the contract. The Hire NYC process requires contractors to enroll with the Hire NYC system within thirty days after the registration of the contract subject to this solicitation, to provide information regarding all entry to mid-level job opportunities arising from this contract and located in New York City, and to agree to interview qualified candidates from HireNYC for those opportunities. The Rider also includes reporting requirements unrelated to HireNYC.
(NO TEXT ON THIS PAGE)

## SPECIAL NOTICE TO BIDDERS

The New York City Department of Small Business Services (SBS), in conjunction with the New York Business Development Corporation (NYBDC), have established a NYC Construction Loan pilot program to provide prime contractors and subcontractors financing for mobilization costs on certain City construction projects.

Under this initiative, loans are available for early stage mobilization needs such as insurance, labor, supplies and equipment. Bidders are strongly encouraged to visit "Growing Your Business" at www.nyc.gov/nycbusiness to leam more about the loan or contact constructionloan@sbs.nyc.gov / (212) 513-6444 to obtain details and to determine preliminary eligibility.

A successful loan applicant will be required to make an assignment of its contract (or subcontract) payments to the lender NYBDC until the loan is repaid. If the loan is to a subcontractor, a prime contractor must honor the terms of such an assignment.

A prime contractor may not discriminate against a subcontractor or potential subcontractor by reason of the subcontractor's participation, or nonparticipation, in the NYC Construction Loan program.
(NO TEXT ON THIS PAGE)

## NOTICE TO VENDORS

Please be advised that, pursuant to the authority granted to the City under Labor Law $\S 816$-b, the New York City Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this solicitation, and any of its subcontractors with subcontracts worth two million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.
The failure to prove, upon request, that these requirements have been met shall result in the contract not being awarded to the contractor or the subcontractor not being approved.

Please be further advised that, pursuant to Labor Law §220, the allowable ratio of apprentices to journeypersons in any craft classification shall not be greater than the ratio permitted to the contractor as to its workforce on any job under the registered apprenticeship program.
(NO TEXT ON THIS PAGE)

## REQUEST FOR INFORMATION (RFI)

Please be advised that RFI's should be submitted to the Agency Contact Person at least forty-eight (48) hours prior to the bid opening date as indicated in ATTACHMENT 1 - BID INFORMATION, page A-1 and SCHEDULE B, page 13, VOLUME 1 OF 3 of this BID BOOKLET.
(NO TEXT ON THIS PAGE)

## CITY OF NEW YORK

## DEPARTMENT OF <br> DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

## BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: HWR100PAD

HYLAN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK

# CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE 

BID BOOKLET
TABLE OF CONTENTS
SECTION PAGE
PART A

1. Table of Contents ..... 1
2. Special Notice to Bidders ..... 2
3. Attachment 1-Bid Information ..... A-1
4. Bid Schedule ..... B-1
5. Bid Form ..... C-1
6. Affirmation ..... C-6
7. Bid Bond ..... C-7
8. $M / W B E$ Program: M/WBE Utilization Plan ..... 5
9. Apprenticeship Program Requirements ..... 19
PART B
10. Safety Questionnaire ..... 21
11. Pre-award Process ..... 24
12. Project Reference Form ..... 26
13. Contract Certificate ..... 29
14. Vendex Compliance ..... 30
15. Iran Divestment Act Compliance Rider ..... 31
16. Construction Employment Report ..... 33
(NO TEXT ON THIS PAGE)

# CITY OF NEW YORK <br> DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE 

## SPECIAL NOTICE TO BIDDERS

BID SUBMISSION REQUIREMENTS

## THE FOLLOWING DOCUMENTS ARE TO BE COMPLETED AND SUBMITTED WITH THE BID:

1. Bid Schedule and Bid Form, including Affirmation
2. Bid Security (if required, see Attachment 1 on Page A-1)
3. Buy America Certification (Appendix A in FTA - PAGES)

## FAILURE TO SUBMIT ITEMS (1), (2) AND (3) WILL RESULT IN THE DISOUALIFICATION OF THE BID.

4. Safety Questionnaire
5. Construction Employment Report (if bid is $\$ 1,000,000$ or more)
6. Contract Certificate (if bid is less than $\$ 1,000,000$ )
7. Confirmation of Vendex Compliance
8. Bidder's Certification of Compliance with Iran Divestment Act
9. Special Experience Requirements (if applicable)
10. Apprenticeship Program Questionnaire (if applicable)
11. FTA DBE Goal Page
12. Disclosure of Lobbying Activities (Appendix A1 in FTA - PAGES)
13. Debarment and Suspension Certification (Appendix A2 in FTA - PAGES) (To be submitted by successful Bidder)
14. Any addenda issued prior to the receipt of bids

This Contract must meet the requirements of 49 CFR Part 29. As such, the Contractor is required to verify that neither the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945 from transactions by any federal department or agency.

## FAILURE TO SUBMIT ITEMS (4) THROUGH (14)

MAY RESULT IN THE DISOUALIFICATION OF THE BID.
NOTES: (1) All of the above referred to blank forms to be completed and submitted with the bid are included in the BID BOOKLET.
(2) If the bidder has any questions or requires additional information, please contact the Department of Design and Construction by phone (718-391-2601) or by fax (718-391-2615).
(3) VENDEX QUESTIONNAIRES: The Bidder is advised that Vendex Questionnaires and procedures have been changed. Vendex Questionnaires, as well as detailed instructions, may be obtained at www.nyc.gov/vendex. The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
(4) SPECIAL EXPERIENCE REQUIREMENTS: The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3, 3a, 3b, and 4 of this Bid Booklet.
(5) Apparent low bidder to submit DBE Utilization Goal Forms in Compliance with FTA DBE requirements (AAP 15, AAP 19, AAPHC-89, AAP 10) within 7 calendar days of the bid date.

## SPECIAL NOTICE TO BIDDERS

## SPECIAL EXPERIENCE REQUIREMENTS (Revised 03/2014)

(A) SPECIAL EXPERIENCE REOUIREMENTS FOR THE BIDDER: The Special Experience Requirements set forth below apply to the bidder. Compliance with such Special Experience Requirements will be determined solely by the City prior to an award of contract. Failure to comply with the Special Experience Requirements will result in rejection of the bid as non-responsive.

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

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

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

Trunk Water Main Work: The entity that will perform the trunk water main work must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work.

Best Management Practice Work: Best Management Practice ("BMP") Work is any item of work in the Bid Schedule that begins with the prefix "BMP". The entity that will perform any BMP Work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work.

For professional services in connection with BMP Work, (i.e., monitoring and reporting services), the individual who will perform the required services must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. Additional requirements are set forth below.
$\square \quad$ The individual serving as the Restoration Specialist (Construction Monitor) must be a Registered Landscape Architect licensed by the state of New York, or must have equivalent professional experience.

The individual serving as the Erosion and Sediment Control Licensed/Certified Professional must be a Certified Professional in Erosion and Sediment Control (CPESC), certified by CPESC, Inc.

Micro-Tunneling/Pipe Jacking Work: The entity that will perform the micro-tunneling/pipe jacking work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.
$\square$ OTHER:

## (B) SPECIAL EXPERIENCE REOUIREMENTS FOR SPECIFIC AREAS OF WORK (to be provided after an award of contract):

The requirements in this Section (B) apply to this contract where indicated by a blackened box (■).
The Special Experience Requirements set forth below apply to the contractor, subcontractor or subsubcontractor that will perform the specific area of work. Compliance with such Special Experience Requirements will be determined solely by the City after an award of contract. After an award of contract, when requested by the City, the contractor will be required to submit the qualifications of the contractor, subcontractor or sub-subcontractor that will perform the specific area of work. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or subsubcontractor must demonstrate compliance with the Special Experience Requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

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

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

Pile, CFA Pile, and/or Mini-Pile Work: The entity that will perform the Pile, CFA Pile and/or MiniPile Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Pile Work, (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.
$\square$ Construction Report, Monitoring And Post-Construction Report, and Continuous Real-Time Monitoring For Vibrations And Movements And Post-Construction Report Work: The entity that will perform the Construction Report, Monitoring For Vibrations And Movements, and PostConstruction Report Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

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

## $\square$ OTHER:

(C) SPECIFICATIONS: In the event of any conflict, omission or inconsistency between (1) the Specifications and/or Contract Drawings, and (2) the Special Experience Requirements in Section (B) of the Special Notice To Bidders, the special experience listed in the Specifications and/or Contract Drawings shall be controlling. The Special Experience Requirements in Section (B) of this Special Notice To Bidders are only for the convenience of the bidders.
(D) SUBMISSION REOUIREMENTS: For each project submitted to demonstrate compliance with the Special Experience Requirements, the bidder must complete and submit the Qualification Form included in the Bid Booklet. The City will only evaluate a project if the following criteria are met: (1) the project is described on the Qualification Form, and (2) all information on the Qualification Form is provided. The City will not evaluate any project which does not comply with the criteria set forth herein, including any project which is referred to only on the resume of an individual.

If Special Experience Requirements are indicated for any specific area of work, the submission requirement set forth above shall apply to the entity that will perform the specific area of work.
(E) CONDITIONS: In determining compliance with the Special Experience Requirements for the bidder set forth above, the City may consider prior projects completed by principal(s) or other employees of the bidder while affiliated with another entity, subject to the conditions set forth below.

- Any principal or other employee on whose prior experience the bidder is relying to demonstrate compliance with this special experience requirement must have held the following: (a) a significant management role in the prior entity with which he/she was affiliated, and (b) a significant management role in the entity submitting the bid for a period of six (6) months or more from the inception of the bidding entity.
- The bidder may not rely on the experience of its principals or other employees to demonstrate compliance with any other requirements, including without limitation, financial requirements or requirements for a specified minimum amount of annual gross revenues.
(F) JOINT VENTURES: In the event the bidder is a joint venture, at least one firm in the joint venture must meet the above described experience requirements.


## Qualification Form

List previous projects completed to meet the special experience requirements for this contract. Please photocopy this form for submission of all required projects.

Name of Contractor: $\qquad$
Name of Project: $\qquad$
Location of Project: $\qquad$
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: $\qquad$
Title: $\qquad$ Phone Number: $\qquad$
Brief description of the Project completed or the Project in progress: $\qquad$

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: $\qquad$
Amount of Contract, Subcontract or Sub-subcontract: $\qquad$
Start Date and Completion Date: $\qquad$

Name of Contractor: $\qquad$
Name of Project: $\qquad$
Location of Project: $\qquad$
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: $\qquad$
Title: $\qquad$ Phone Number: $\qquad$
Brief description of the Project completed or the Project in progress: $\qquad$

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: $\qquad$
Amount of Contract, Subcontract or Sub-subcontract: $\qquad$
Start Date and Completion Date: $\qquad$

# ATTACHMENT 1 - BID INFORMATION 

PROJECT ID: HWR100PAD PIN: 8502016HW0013C
Description and Location of Work:
HYLAN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK
Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK


Bid Security: Bid Security is required in the amount set forth below; provided, however, bid security is not required if the TOTAL BID PRICE set forth on the Bid Form is less than $\$ 1,000,000.00$.
(1) Bond in an amount not less than $10 \%$ of the TOTAL BID PRICE set forth on the Bid Form, OR
(2) Certified Check in an amount not less than $10 \%$ of the TOTAL BID PRICE set forth on the Bid Form.

Performance and Payment Security: Required for contracts in the amount of $\$ 1,000,000$ or more. Performance Security and Payment Security shall each be in an amount equal to $100 \%$ of the Contract Price.

## Agency Contact Person: Lorraine Holley

Phone: 718-391-2601
FAX: 718-391-2615
(NO TEXT ON THIS PAGE)

## 1. Participation by Disadvantaged Business Enterprises (DBE)

1.1. Bidders' attention is called to NYCDOT DBE Utilization Goal in Compliance with FTA DBE Requirements included in the FTA Third Party Requirements (annexed to FTA - PAGES). A DBE utilization goal of eleven percent ( $11 \%$ ) has been established for this Contract.
1.2. Bidders are required to document sufficient DBE participation to meet the contract specific goal of eleven percent ( $11 \%$ ) DBE participation or, alternatively, document adequate good faith efforts to do so, as provided for in 49 CFR 26.53. Award of this contract is conditioned on submission of the following:

- NYCDOT DBE Utilization Goal Forms attached hereto as part of the FTA DBE Requirements. Please complete and submit with the bid the following (annexed to FTA PAGES) :
a) (Form AAP 15) Please fill out to provide the Name of Bidder's Designated DBE Officer;
b) (Form AAP 19 FTA - DBE Schedule of Utilization).

In preparation of the Bid Form, Bidders shall consider the Dollar Value of work to be performed by the potential DBE subcontractors. Please note that for Materials or Suppliers (MS) utilized to attain the project's $\mathbf{1 1 \%}$ DBE goal, only $\mathbf{6 0 \%}$ of associated supplier contract value could be accounted for the Dollar Value of Utilization.

The following forms shall be provided by the successful bidder:

- Complete form AAPHC 89 FTA (DBE Utilization Worksheet) and 89-1 FTA to report if there has been any changes from original utilization plan (annexed to FTA - PAGES) to be submitted by the successful Bidder as a part of post-bid submission.


## 2. Federal Aid Requirements

2.1. Payments for the Contract Work will be funded in part by Federal funds from the Federal Transit Administration ("FTA") and New York State Department of Transportation (NYSDOT). The receipt of such funds is conditioned upon the Bidder's compliance with certain Federal and State provisions with respect to the submission of bids. The Bidder must comply with the applicable provisions set forth in the FTA Third Party Requirements (annexed to FTA - PAGES), as well as Standard Clauses for All New York State Contracts (annexed to FTA - PAGES). The Bidder shall be responsible for submitting all certifications, schedules, documents and any other materials required hereunder.
3. Federal Requirements Compliance Certifications
3.1. FTA regulations require Bidders to complete and submit the following certifications which are annexed to the FTA Requirements:

### 3.1.1. Buy America Certification (To be submitted with bid)

- This solicitation and the resulting contract are subject to the Buy America requirements of 49 U.S.C. Section 5323(j) and the Federal Transit Administration's implementing regulations found at 49 C.F.R. Part 661. These regulations require, as a matter of responsiveness, that the Bidder submits with its bid a completed certification in accordance with Part 661.6 or 661.12, as appropriate. These certifications are set forth in this solicitation at Appendix A (annexed to FTA - PAGES). Bids that are not accompanied by a completed Buy America Certification shall be rejected as non-responsive.
- If the Bidder seeks a waiver to the Buy America provision, an application for a waiver must be submitted. The application should contain its justification to support the waiver and must be submitted within five (5) working days of the bid opening. (The Bidder is referred to 49 CFR 661.7, for guidance on preparation of a Buy America waiver application).
3.1.2. Debarment and Suspension Certification (To be submitted by successful Bidder)
3.1.2.1. This Contract must meet the requirements of 49 CFR Part 29. As such, the contractor is required to verify that neither the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945 from transactions by any federal department or agency.
3.1.2.2. Fill out and submit form on Appendix A2 (annexed to FTA - PAGES).
3.1.2.3. The Contractor must also ensure that they and their subcontractors are not included in the Excluded Parties list by visiting the Federal website and inserting their name in the "search exclusions" in the left hand bar and must provide the printout of the search result that shows that they are not listed in the Excluded Parties list https://www.epls.gov/.


### 3.1.3. Lobbying Certification (To be submitted by successful Bidder)

3.1.3.1. Contractors who apply or bid for an award of $\$ 100,000$ or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352.
3.1.3.2. Fill out and submit form on Appendix A1 (annexed to FTA - PAGES).

### 3.1.4. Non-Collusive Bidding (See "Standard Clauses for all State Contracts" annexed to FTA PAGES)

3.1.4.1. Both State law and Federal regulation require that for work performed under competitively bid contracts, financed with State and/or Federal funds, contractor submitting bids for such contracts certify that they have not engaged in any activity that would artificially affect prices or restrict competition through the exchange or sharing of information among bidders. In addition, Federal law required that the bidder certify that he/she is an eligible bidder under Federal regulations and is nor under, or about to be faced with, any sanction imposed by any Federal agency.

## -3.1.5. DBE (See FTA Third Party Requirements and Appendix B annexed to FTA - PAGES)

3.1.6. Federal Davis-Bacon Wage Rates. All Bidders are directed to the specific provisions of the Contract, that Applicable Statutes and Applicable Agreements that mandate compliance with legal requirements related to payment of wages, in particular, Federal Davis-Bacon Wage Rates applicable to the Contract work to be performed by the contractor at the time the work is performed.
3.1.6.1. A copy of the current federal Davis-Bacon Wage rates as of the date this IFB was prepared is attached to FTA - PAGES. Bidders and the selected Contractor, if any, shall be responsible for confirming and adhering to the actual Davis-Bacon Wage rates in effect at the time after the issuance of this IFB including, without limitation, during the contract term. Federal Davis-Bacon Wage rates may be accessed through the US department of Labor's Website at: http://www.wdol.gov/wdol/scafiles/davisbacon/ny.html.
(NO TEXT ON THIS PAGE)

# DISADVANTAGE BUSINESS ENTERPRISE UTILIZATION GOALS <br> For 

Federal Transit Administration Projects

## New York City Department of Transportation

The New York City Department has established the following Disadvantaged Business Enterprise (DBE) utilization goal for this contract. The goal is expressed as a percentage of the total federal share of the contract. It is the Contractor's responsibility to secure DBE participation in the contract work to satisfy this goal, and to document acceptable good-faith efforts taken to fulfill the goal. Utilization is measured as the amount actually paid to DBE's, not the contract bid price for the work.

Disadvantaged Business Enterprise Utilization Goal _11\%
A list of currently certified Disadvantage Business Enterprises can be obtained by contacting the Unified Certification program for NYS on the web:
http://biznet.nysucp.net/

## Disadvantaged Business Enterprise Officer

The Bidder shall designate and enter below the name of a Disadvantaged Business Enterprise Officer who have the responsibility for effectively administering and promoting an active Disadvantaged Business Enterprise Program and who must be assigned adequate authority and responsibility to do so.

Bidder-Designated DBE Officer:
(Name, Title)
Telephone:
Fax Number:
E-Mail Address

All applicants and recipients shall agree to abide by the statements in paragraphs (1) and (2) listed below:

1. "Policy. It is the policy of USDOT that DBE's as defined in 49 CFR Part 26 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the DBE requirements of 49 CFR Part 26 apply to this agreement."
2. "DBE Obligation. The recipient or its contractor agrees to ensure that DBE's as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that DBE's have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall no discriminate on the basis of race, color national origin, or sex in the award and performance of US DOT assisted contracts.

Because this is a federally funded project with its own DBE requirement (noted above) no separate NYC M/WBE program condition will apply to this contract. Further information or questions can be directed to:

New York City Department of Design and Construction Internal Audit Division Contract Compliance Unit 30-30 Thomson Avenue L.I.C., New York 10001<br>Telephone: (718) 391-1716<br>Email: LibonatTh@ddc.nyc.gov

Attention: Thomas Libonati, Federal Contracts Compliance Officer

## BID SCHEDULE

## NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 CB ) shall comply with the requirements of the corresponding numerical Sections of the NYCDOT Standard Highway Specifications as amended by I-PAGES or R-PAGES, herein Volume 3 of 3 .

Items listed in this Bid Schedule which have two (2) digits beginning with the number "5" or "6" or "7" followed by a decimal (e.g. 52.11D12, $60.11 \mathrm{R} 606,72.11 \mathrm{HF}$ ) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer and Water Main Specifications, dated July 1, 2014, as amended by SW-PAGES, herein Volume 3 of 3.
(NO TEXT ON THIS PAGE)
1/19/2016 12:00 AM NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016HW0013C

1/19/2016 12:00 AM
PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

## BID SCHEDULE FORM


B-5

## BID SCHEDULE FORM



B-8
PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016HW0013C
BID SCHEDULE FORM

B-9
PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
BID SCHEDULE FORM
W* 00:ZL. 910Z/6L/L

B-11

PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN BID SCHEDULE FORM

| $\begin{array}{r} \text { CoL } \\ \text { SER No } \\ \hline \end{array}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 053 | 6.84 B <br> LOLLIPOP TYPE BUS STOP SIGNS <br> PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00 | 1.00 | F.S. | 150,000 | 150,000 00 |
| 054 | 6.87 <br> pLASTIC barrels | 1,600.00 | EACH |  |  |
| 055 | 6.91 <br> REFLECTIVE CRACKING MEMBRANE (18" WIDE) | 66.00 | L.F. |  |  |
| 056 | 6.99 <br> AUDIO AND VIDEO DOCUMENTATION SURVEY | 1.00 | L.S. |  | ! |
| 057 | 60.11R520 <br> FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55) | 160.00 | L.F. |  |  |

PROJECT ID: HWR100PAD
PONTRACT PIN: 8502016HW0013C
CONTRACT PIN: 8502016HW0013C
NOILOn४ DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

## BID SCHEDULE FORM


B-14
PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016HW0013C CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
BID SCHEDULE INFRASTRUCTURE - BUREAU OF DESIGN
SORM

PROJECT ID: HWR100PAD
CONTRACT PIN: 8502016 HW0013C


B-17
B-18

1/19/2016 12:00 AM

| $\begin{gathered} \text { COL. }{ }^{1} \text { 1 } \\ \text { SEO. NO } \end{gathered}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 093 | 70.91SW12 | 55.00 | S.F. |  |  |  |
|  | FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12 -INCH IN DIAMETER AND LESS |  |  |  |  |  |
| 094 | 70.91SW20 | 3,080.00 | S.F. |  |  |  |
|  | FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER |  |  |  | ; | - |
| 095 | 72.11 HF <br> HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS | 325.00 | C.Y. |  |  |  |
| 096 | 73.31AE0 | 20.00 | C.Y. |  |  |  |
|  | ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: $\$ 23.00$ |  |  |  | + | \% |
| 097 | 73.41AG <br> ADDITIONAL SELECT GRANULAR BACKFILL | 20.00 | C.Y. |  |  |  |
|  | Unit price bid shall not be less than: \$17.25 |  |  |  |  |  |
| 098 | 8.01 C 1 | 750.00 | TONS |  | , |  |
|  | handuing, TRANSPORTING AND disposal of non-hazardous CONTAMINATED SOIL |  |  |  | , | - |



| 1/19/2016 12:00 AM <br> NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN BID SCHEDULE FORM <br> PROJECT ID: HV CONTRACT PIN: 85 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|c\|} \hline \text { COL. 1 } \\ \text { SEQ. NO } \\ \hline \end{array}$ |  | Colishy Encineris Eshate Orquantry |  |  |  |
| 105 | $8.02 \text { B }$ <br> SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK | 220.00 | L.F. |  |  |
| 106 | $8.32$ <br> BARK CHIP MULCH | 100.00 | S.Y. | ! | + |
| 107 | 9.04 HW <br> ALLOWANCE FOR ANTL-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ $\mathbf{5 7 , 5 0 0 . 0 0}$ | 1.00 | F.S. | $\begin{array}{c:c} \hline 57,500 & 00 \\ & \end{array}$ | 57,500:00 |
| 108 | 9.99 M <br> FLASHING ARROW BOARD | 12.00 | MONTH | ! |  |



PROJECT ID: HWR100PAD
HYLAN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK
Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK

Name of Bidder: $\qquad$
Date of Bid Opening: $\qquad$
Bidder is: (Check one, whichever applies) Individual ( ) Partnership () Corporation () Place of Business of Bidder: $\qquad$
Bidder's Telephone Number: $\qquad$ Fax Number: $\qquad$
Bidder's E-Mail Address: $\qquad$
Residence of Bidder (If Individual): $\qquad$
If Bidder is a Partnership, fill in the following blanks:
Names of Partners
Residence of Partners
$\qquad$
$\qquad$
$\qquad$
If Bidder is a Corporation, fill in the following blanks:
Organized under the laws of the State of $\qquad$
Name and Home Address of President: $\qquad$
Name and Home Address of Secretary: $\qquad$
Name and Home Address of Treasurer: $\qquad$

## BID FORM

The above-named 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 page C-6 of this Bid Booklet.

The bidder hereby affirms that it has paid all applicable City income, excise and other taxes for all years it has conducted business activities in New York City.
5. 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 herein shall mean the individual bidder, firm, partnership or corporation executing this bid).

## 6. 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.

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.
7. 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.
8. 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.
9. 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:
(NO TEXT ON THIS PAGE)

## BID FORM

## PROJECT ID. HWR100PAD

TOTAL BID PRICE: In the space provided below, the Bidder shall indicate its Total Bid Price in figures. Such Total Bid Price is set forth on the final page of the Bid Schedule.

## TOTAL BID PRICE: <br> ( $\mathrm{a} / \mathrm{k} / \mathrm{a}$ BID PROPOSAL)

\$ $\qquad$

## AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

$\qquad$ ss:

I me the person described in and who executed the foregoing bid, and the several matters therein stated are in I am the person described in and who executed the foregoing bid, and the several matters therein stated are in all respects true.
(Signature of the person who signed the Bid)
Subscribed and sworn to before me this
$\qquad$
day of ,

## Notary Public

## AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP

STATE OF NEW YORK, COUNTY OF $\qquad$ ss: the firm described in and which executed the foregoing I am a member of $\qquad$ bid. I subscribed the name of the firm thereto on behalf of the firm, and the several matters therein stated are in all respects true.
(Signature of Partner who signed the Bid)
Subscribed and sworn to before me this
$\qquad$ day of $\qquad$ , $\qquad$

Notary Public

## AFFIDAVIT WHERE BIDDER IS A CORPORATION

STATE OF NEW YORK, COUNTY OF $\qquad$ ss: being duly sworn says:
I am the $\qquad$ of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at $\qquad$
$\qquad$ _. I have knowledge of the several matters therein stated, and they are in all respects true.
(Signature of Corporate Officer who signed the Bid)
Subscribed and sworn to before me this
$\qquad$ day of $\qquad$ , $\qquad$

Notary Public

## AFFIRMATION

## PROJECT ID. HWR100PAD

The undersigned bidder affirms and declares that said bidder is not in arrears to the City of New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except: $\qquad$
(If none, the bidder shall insert the word "None" in the space provided above.)

Full Name of Bidder: $\qquad$
Address:
City $\qquad$ State $\qquad$ Zip Code $\qquad$
CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

B - Partnership, Joint Venture or other unincorporated organization EMPLOYER IDENTIFICATION NUMBER

By: $\qquad$
Signature
Title: $\qquad$
If a corporation, place seal here
This affirmation must be signed by an officer or duly authorized representative.
*Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying of businesses which seek City contracts.
(NO TEXT ON THIS PAGE)

## BID BOND 1 <br> FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, $\qquad$
hereinafter referred to as the "Principal", and $\qquad$
$\qquad$
hereinafter referred to as the "Surety" are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "CITY", or to its successors and assigns in the penal sum of $\qquad$
(\$ $\qquad$ ), Dollars lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

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

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said Proposal without the consent of the City for a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's Proposal by the City, if the Principal shall:
(a) Within ten (10) days after notification by the City, execute in quadruplicate and deliver to the City all the executed counterparts of the Contract in the form set forth in the Contract Documents, in accordance with the proposal as accepted, and
(b) Furnish a performance bond and separate payment bond, as may be required by the City, for the faithful performance and proper fulfillment of such Contract, which bonds shall be satisfactory in all respects to the City and shall be executed by good and sufficient sureties, and
(c) In all respects perform the agreement created by the acceptance of said Proposal as provided in the Information for Bidders, bound herewith and made a part hereof, or if the City shall reject the aforesaid Proposal, then this obligation shall be null and void; otherwise to remain in full force and effect.

## BD BOND 2

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

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

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

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

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the $\qquad$ day of $\qquad$ , $\qquad$ .
(Seal)
$\overline{\text { Principal }}$ (L.S.)

By: $\qquad$
(Seal)
Surety
By: $\qquad$

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION


## Notary Public

## ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

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

Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL
State of $\qquad$ County of $\qquad$ ss:
On this $\qquad$ day of $\qquad$ , $\qquad$ , before me personally appeared to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same.

## M/WBE PROGRAM

## M/WBE UTILIZATION PLAN

M/WBE Program Requirements: The requirements for the M/WBE Program are set forth on the following pages of this Bid Booklet, in the section entitled "Notice to All Prospective Contractors".

Schedule B: M/WBE Utilization Plan: Schedule B: M/WBE Utilization Plan for this Contract is set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". The M/WBE Utilization Plan (Part I) indicates whether Participation Goals have been established for this Contract. If Participation Goals have been established for this Contract, the bidder must submit an M/WBE Utilization Plan (Part II) with its bid.

Waiver: The bidder may seek a full or partial pre-award waiver of the Participation \&eals in accordance with the "Notice to All Prospective Contractors" (See Fart A, Section 10). The oidder Ss request for a waiver must be submitted at least seven (7) calendar days vior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiker of the Participation Goals is set forth in the M/WBE Utilization Plan (Part III).

Rejection of the Bid: The bidder must complete Schedule B: M/WBE Utilization Plan (Part II) set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". A Schedule B submitted by the bidder whick does not include the Vendor Certification and Required Affirmations (See Section V of Part II will be deemed to be nen-responsive, unless a full waiver of the Participation Goals is granted (Schedule B, Part III) In the event that the City determines that the bidder has submitted a Schedule 1 where the Vender Certification and Required Affirmations are completed but other aspects of the Schedvle B are not complete, or contain a copy or computation error that is at odds with the Vendor Certification and Reqxired-Affirmations, the bidder 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 is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) calendar days from the date of mailing or upon delivery, if delivered.

Impact on LBE Requirements: If Participation Goals have been established for the participation of M/WBEs, the contractor is not required to comply with the Locally Based Enterprise Program ("LBE"). The LBE Program is set forth in Article 67 of the Contract.

## NOTICE TO ALL PROSPECTIVE CONTRACTORS

## PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

## ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). 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 Contyct areset forth in Schedule $\mathbf{R}$ of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor nust 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. 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 priscellaneous provisions related to the M/WBE Program.

## PARTICIPAFHON GOALS FOR CONSTRUCTYON, STANDARD <br> AND PROFESSIONAL SERXICES 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 sot forth on Schedule B, Part I to this Contract (see Page 1, line 1 Total Participation Goals) or will be senforth on Schedule B, Part I 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 New York City Department of Small Business Services 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 II (see Pages 2-4) 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; and (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. 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 typecontract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agrement") and is subject to M/WBE Participation Goals, a prospective contractor shall be required tossabmit with ios bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirenents for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonale good faith efforts to meet prrticipation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is pbtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and gbtaining 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 than may be establisked on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemednonresponsive.
(ii) Participation Goaks on a Msster Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. IfParticipation 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 Rursuant to Master Services Agreements, Part II (see Pages 2-4) 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; and (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. 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 II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). 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 WLL 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 multiyear 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 $\$ 3 \mathrm{M}$ 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 ordac for the Costracto to crealit such firms' participation toward the attainment of the Participation Goals. Such centification must occar prior to the firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gфv, by calling (212) 573 -6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7tp 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 (218) 513-d, 11. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MPEs or the of for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, an defned in Section 6-129(c)(20).
7. Where an M/WBE Utilization Plan hats been stapmitted, 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 amount the Confractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-189(j), the tetal amonnt direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbersof each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's directsubcontractors; 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 III (Page 5) 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 zhangji@ddc.nyc.gov or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted 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 applicablethat it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Xtilization 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 pona fte 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 yhether 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 yrth 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 Centractor may request a modification of its M/WBE Utilization Plan after award of this Contraet PDEASE NQTE: If this Contract is a public works project subject to GML $\S 101(5)$ (i.e., a contract valued at or below $\$ 3 M$ for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with yabor Law $\$ \mathbf{2 2 2}$, 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 docymentary 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 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.
13. 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, inchuding but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subeontractors and the payments the Contractor made to such subcontractors.
14. If Participation Goals have beek 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 overal contract performance evaluation.

1. The Contractor shall take notice that, if this solicitation requires the establishment of an M/WBE Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See $\S 6-129$ (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 an 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 6-129, including, but not limited to any M/WBE Utilization Plan, Agency shall send a mxitten notice to the Contractor describing the alleged noncompliance and offering the Contractor 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 yiolated section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that inplements 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 Contractorto cure the violation;
(b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts; making a finding that the-Contractor is in defaut of the Contracy;
(d) terminating the Contract;
(e) declaring the Contractor to be in breach of Contract;
(f) withholding payment $\delta x$ reimbursement;
(g) determining not to renew the Contract;
(h) assessing actual and consequential dankages;
(i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying oyy the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting atilization goals through additional procurements, the administrative charge the cost of such contract to the Contractor that has been found to be in noncompliance; or 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 commerelally useful function (as defined in Section 6129 (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 revokod
6. Statements made in any instrument submitted to Agency pursuant of Section 6-129 shan 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 froudutent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addjion, be grounds for revocation of its certification.
7. The Contractor's record in implementing its MXWBE Utilization Pan shall be a factor in the evaluation of been unsatisfactory, Agency shah, after consultation with the City Chjef Procurement Officer, file an advice of
caution form for inclusion in VENDEX as caution data.

## SCHEDULE B - M/WBE Utilization Plan Part I: M/WBE Participation Goals

## Part I to be completed by contracting agency

## Contract Overview



MMWE Participation Goals for Services
Enter the percentage amount for each group or for an unspiecitied goal. Please note that there are no goals for Asian Americans in Professional Senvices.

## Prime Contract Industry: Construction

| Group | Percentage |  |
| :---: | :---: | :---: |
| Unspecified* | EXEMPT \% |  |
| or |  |  |
| Black American | UNSPECIFIED* |  |
| Hispanic American | UNSPECIFIED* |  |
| Asian American | UNSPECIFIED* |  |
| Women | UNSPECIFIED* |  |
| Total Participation Goals | EXEMPT \% | Line 1 |

*Note: For this procurement, individual ethnicity and gender goals are not specified. The Total Participation Goal for construction contracts may be met by using either Black-American, Hispanic-American, Asian American, or Women certified firms or any combination of such firms.
$\qquad$
$\qquad$

## SCHEDULE B - Part II: M/WBE Participation Plan

Part II to be completed by the bidder/proposer.
Please note: For Non-M/WBE Prime Contractors who will NOT subcontract any services and will self-perform the entire contract, you must obtain a FULL waiver by completing the Waiver Application on pages 17 and 18 and timely submitting it to the contracting agency pursuant to the Notice to Prospective Contractors. Once a FULL WAIVER is granted, it must be included with your bid or proposal and you do not have to complete or submit this form with your bid or proposal.

Section I: Prime Contractor Contact Information

FMS Vendor ID \#
Contact Person $\qquad$
Address
Telephone \# PRIME CONTRACTOR ADOPTING AGENCY M/WBE PARTICIPATION GOALS
$\square$ For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.

Calculate the total dollar value of \&our total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor er Qualified Joint Venture.

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.

## Section II: M/WBE Utilization Goal Calculation: Check the applicable box and complete subsection.



PRIME CONTRACTOR OBTAINED PARTIAL WAIVER APPROVAL: ADOPTING MODIFIED M/WBE PARTICIPATION GOALS

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

Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture.

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.

| Total <br> Bid/Proposal <br> Value |  | Adjusted <br> Participation Goal <br> (From Partial Waiver) |  |
| :---: | :---: | :---: | :---: |
|  |  | Calculated M/WBE <br> Participation <br> Amount |  |
| $\$$ |  |  |  |
| $\$$ |  |  |  |

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

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

As a non M/WBE Prime Contractor that will enter into subcontracts with M/WBE firms the value of which is at least the amount located on Lines 2 or 3 above, as applicable.

## Section IV: General Contract Information

What is the expected percentage of the total contract dollar value that you expect to awara in subcontracts for services, regardless of M/WBE status? \% $\qquad$
$\checkmark$ Scopes of Subcontract Work

$\qquad$

## Section V: Vendor Certification and Required Affirmations

I hereby:

1) acknowledge my understanding of the MWBE participation requirements as set forth herein and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York ("Section 6129"), and the rules promulgated thereunder;
2) affirm that the information supplied in support of this MWBE Utilization Plan is true and correct;
3) agree, if awarded this Contract, to comply with the MWBE 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 MWBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such goals are modified by the Agency; and
5) agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the MWBE 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.


## SCHEDULE B - PART III - REQUEST FOR WAIVER OF M/WBE PARTICIPATION REQUIREMENT

## Contract Overview

## Tax ID \# <br> Business Name <br> Contact Name

FMS Vendor ID \#

Type of Procurement
 procurement):
$\qquad$ MNWBE Participation Goals as described in bid/solicitation documents F \%

Agency M/WBE Participation Goal

## Proposed MWBE Participation Goal as anticipated by vendor seeking walver

$\%$ of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for services and/or credited to an M/WBE Prime Contractor or Qualified Joint Venture.
Basis for Waiver Request: Check appropriate box \& explain in detail below (attach additional pages if needed)Vendor does not subcontract services, and has the capacity and good faith intention to perform all such work itself with its own employees.

Vendor subcontracts some of this type of work but at a lower\% than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract. (Attach subcontracting plan outlining services that the vendor will self-perform and subcontract to other vendors gr consultants.)
$\square$ Vendor has other legitimate business reasons for proposing the MANBE Participation Goal above. Explain under separate cover.

## References

List 3 most recent contracts performed for NYC agencies (K any). Include information for each subcontract awarded in performance of such contracts. Add more pages If kecessary,


Total Contract
Amount \$
Item of Work Subcontracted and Value of subcontract

AGENCY
Total Amount
Subcontracted \$
Item of Work
Subcontracted and
Value of subcontract

## DATE COMPLETED

$\qquad$

Item of Work Item of Work Subcontracted and Value of subcontract $\qquad$
$\qquad$
$\qquad$

## AGENCY

Total Amount Subcontracted \$

Item of Work Subcontracted and Value of subcontract

Subcontracted and Value of subcontract

DATE COMPLETED $\qquad$

Item of Work
Subcontracted and Value of subcontract

## DATE COMPLETED

Item of Work Subcontracted and Value of subcontract
$\qquad$

List 3 most recent contracts performed for other entities. Include information for each subcontract awarded in performance of such contracts. Add more pages if necessary. (Complete ONLY if vendor has performed fewer than 3 New York City contracts.)

TYPE OF Contract $\qquad$ ENTITY

## DATE COMPLETED

Manager at entity that hired vendor (
Total Contract
Amount $\$$
Type of Work
Subcontracted

## TYPE OF Contract

Manager at agency/entity that hired vendor (Name/Phone No./Email)


Subcontracted and Value of subcontract Item of Work Subcontracted and Value of subcontract

TYPE OF Contract


Manager at entity that hired vendor (Name/Phone No./Email)

Total Contract

> Amount

Item of Work
Subcontracted and
Value of subcontract

## Total Amount

 Subcontracted \$Item of Work
Subcontracted and Value of subcontract
$\square$
Item of Work Subcontracted and Value of subcontract

## VENDOR CERTIFICATION: I hereby affirm that the information supplied in support of this waiver request is true and correct, and that this request is made in good faith.

Signature:
Print Name: $\qquad$

Date:
Title: $\qquad$


## APPRENTICESHIP PROGRAM REQUIREMENTS

Bidders are advised that the Apprenticeship Program Requirements set forth below apply to each contract for which a check mark is indicated before the word "Yes". Compliance with these requirements will be determined solely by the City.

$\qquad$ NO

## (1) Apprenticeship Program Requirements

Notice to Bidders: Please be advised that, pursuant to the authority granted to the City under Labor Law Section 816-b, the Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this Invitation for Bids, and any of its subcontractors with subcontracts worth two million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

The failure to prove, upon request, that these requirements have been met shall result in the contract not being awarded to the contractor or the subcontract not being approved.

Please be further advised that, pursuant to Labor Law Section 220, the allowable ratio of apprentices to journeypersons in any craft classification shall not be greater than the ratio permitted to the contractor as to its workforce on any job under the registered apprenticeship program.

## (2) Apprenticeship Program Questionnaire

The bidder must submit a completed and signed Apprenticeship Program Questionnaire. The Questionnaire is set forth on the following page of the Bid Booklet.

## APPRENTICESHIP PROGRAM QUESTIONNAIRE

PROJECT ID: HWR100PAD
The bidder must submit a completed and signed Apprenticeship Program Questionnaire.

Name of Bidder: $\qquad$

1. Does the bidder have an Apprenticeship Program appropriate for the type and scope of work to be performed? [Note: Participation may be by either direct sponsorship or through collective bargaining agreement(s).]
$\qquad$
$\qquad$ NO
2. Has the bidder's Apprenticeship Program been registered with, and approved by, the New York State Commissioner of Labor?

$$
\ldots \text { YES }
$$

$\qquad$ NO
3. Has the bidder's Apprenticeship Program had three years of successful experience in providing career opportunities?
$\qquad$ YES NO

If the answer to Question \#3 is "Yes", the bidder shall, in the space below, provide information regarding the experience the Apprenticeship Program has had in providing career opportunities. The bidder may attach additional pages if necessary.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Bidder: $\qquad$
By: $\qquad$ Title:
(Signature of Partner or Corporate Officer)
Date: $\qquad$
$\qquad$

## SAFETY QUESTIONNAIRE

The bidder must include, with its bid, all information requested on this Safety Questionnaire. Failure to provide a completed and signed Safety Questionnaire at the time of bid opening may result in disqualification of the bid as non-responsive.

## 1. Bidder Information:

Company Name: $\qquad$
DDC Project Number: $\qquad$
Company Size: $\qquad$ Ten (10) employees or less
$\qquad$ Greater than ten (10) employees

Company has previously worked for DDC $\qquad$ YES $\qquad$ NO
$\qquad$
2. Type(s) of Construction Work

TYPE OF WORK
General Building Construction
Residential Building Construction
Nonresidential Building Construction
Heavy Construction, except building
Highway and Street Construction
Heavy Construction, except highways
Plumbing, Heating, HVAC
Painting and Paper Hanging
Electrical Work
Masonry, Stonework and Plastering
Carpentry and Floor Work
Roofing, Siding, and Sheet Metal
Concrete Work
Specialty Trade Contracting
Asbestos Abatement
Other (specify)
$\qquad$

THIS PROJECT
$\qquad$

## 3. Experience Modification Rate:

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

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

YEAR

> INTRASTATE RATE

INTERSTATE RATE

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

## 4. OSHA Information:

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

$\qquad$ NO Contractor has had an incident requiring OSHA notification within 8 hours (all work-related fatalities) or an incident requiring OSHA notification within 24 hours (all work-related in-patient hospitalizations, all amputations and all losses of an eye).

The Occupational Safety and Health Act (OSHA) of 1970 requires employers with ten or more employees, on a yearly basis to complete and maintain on file the form entitled "Log of Work-related Injuries and Illnesses". This form is commonly referred to as the OSHA 300 Log (OSHA 200 Log
for 2001 and earlier).

The OSHA 300 Log must be submitted for the last three years for contractors with more than ten employees.

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

The contractor must submit the Incident Rate for Lost Time Injuries (the Incident Rate) for the past three years. The Incident Rate is calculated in accordance with the formula set forth below. For each given year, the total number of incidents is the total number of non-fatal injuries and illnesses reported on the OSHA 300 Log. The $\mathbf{2 0 0 , 0 0 0}$ hours represents the equivalent of 100 employees working forty hours a week, fifty weeks per year.

Incident Rate $=$

YEAR

TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES

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

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

## 5. Safety Performance on Previous DDC Project(s)

$\qquad$ YES $\qquad$ NO

Contractor previously audited by the DDC Office of Site Safety.
DDC Project Number(s): $\qquad$ , $\qquad$ , $\qquad$
$\qquad$ NO Accident on previous DDC Project(s).

DDC Project Number(s): $\qquad$ , $\qquad$
$\qquad$
__ YES ___ NO Fatality or Life-altering Injury on DDC Project(s) within the last three years. [Examples of a life-altering injury include loss of limb, loss of a sense (e.g., sight, hearing), or loss of neurological function].

DDC Project Number(s): $\qquad$ , $\qquad$

Date: $\qquad$ By: $\qquad$
(Signature of Owner, Partner, Corporate Officer)

Title: $\qquad$
(NO TEXT ON THIS PAGE)

## 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, such information must be submitted by the bidder 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 facsimile or in writing and will specify the types of information must be submitted. The types of information the bidder may be required to submit are described below. 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 on pages 26 through 28 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Similar 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 2 X average monthly billings throughout the contract period.
(8) Any other issues the contractor sees as impacting his ability to complete the project according to the contract.

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

The bidder is further advised that it may be required to attend a pre-award meeting with DDC representatives. If such a meeting is convened, the bidder will be advised as to any additional material to be provided.
A. PROJECT REFERENCES - SIMILAR CONTRACTS COMPLETED BY THE BIDDER
List all contracts substantially completed within the last 4 years similar to the contract being awarded, up to a maximum of 10 , in descending order of date of substantial completion.

| Project \& Location | Contract <br> Type | Contract Amount <br> $(\$ 000)$ | Date <br> Completed | Owner Reference <br> \& Tel. No. | Architect/Engineer <br> Reference \& Tel. No. if <br> different from owner |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
PROJECT REFERENCES - CONTRACTS CURRENTLY UNDER CONSTRUCTION BY THE BIDDER
List all contracts currently under construction even if they are not similar to the contract being awarded.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | $1$ |  |  |  |

BID BOOKLET
DECEMBER 2013

27

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
PROJECT REFERENCES - PENDING CONTRACTS NOT YET STARTED BY THE BIDDER
List all contracts awarded to or won by the bidder but not yet started.

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 荵 |  |  |  |  |  |  |  |
|  |  |  |  | \| |  |  |  |

BID BOOKLET
DECEMBER 2013
(NO TEXT ON THIS PAGE)

# OFFICE OF THE MAYOR <br> BUREAU OF LABOR SERVICES CONTRACT CERTIFICATE 

To be completed if the contract is less than $\$ 1,000,000$

Contractor: $\qquad$
Address: $\qquad$

Telephone Number: $\qquad$
Name and Title of Signatory: $\qquad$

Contracting Agency or Owner: $\qquad$
Project Number: $\qquad$
Proposed Contract Amount: $\qquad$
Description and Address of Proposed Contract: $\qquad$
Names of Subcontractors in the amount of 750,000 or more on this contract (if not known at this time, so state indicating that trades will be subcontracted):
$\qquad$
$\qquad$
$\qquad$
I, (fill in name of person signing)
hereby affirm that I am authorized by the above-named contractor to certify that said contractor's proposed contract with the above-named owner or city agency is less than $\$ 1,000,000$. This affirmation is made in accordance with Executive Order No. 50 (1980) as amended and its implementing regulations.

Date
Signature

WILLFUL OR FRAUDULENT FALSIFICATION OF ANY DATA OR INFORMATION SUBMITTED HEREWITH MAY RESULT IN THE TERV BAR THE BIDDER OR CONTRACTOR FROM THE CITY AND THE BIDDER OR CONTRACT FOR A PERIOD OF UP TO THREE YEARS. FURTHER, PARTICIPATION IN ANY CY RESULT IN CRIMINAL PROSECUTION. SUCH FALSIFICATION MAY RESULT IN CRIMINAL PROSECUTION.
(NO TEXT ON THIS PAGE)

## VENDEX COMPLIANCE

(A) Vendex Fees: Pursuant to Procurement Policy Board Rule 2-08(f)(2), the contractor will be charged a fee for the administration of the VENDEX system, including the Vendor Name Check process, if a Vendor Name Check review is required to be conducted by the Department of Investigation. The contractor shall also be required to pay the applicable required fees for any of its subcontractors for which Vendor Name Check reviews are required. The fee(s) will be deducted from payments made to the contractor under the contract. For contracts with an estimated value of less than or equal to $\$ 1,000,000$, the fee will be $\$ 175$ per Vendor Name Check review. For contracts with an estimated value of greater than $\$ 1,000,000$, the fee will be $\$ 350$ per Vendor Name Check review.
(B) Confirmation of Vendex Compliance: The Bidder shall submit this Confirmation of Vendex Compliance to the Department of Design and Construction, Contracts Section, 30-30 Thomson Avenue First Floor, Long Island City, NY 11101.

Bid Information: The Bidder shall complete the bid information set forth below.
Name of Bidder: $\qquad$
Bidder's Address:
Bidder's Telephone Number:
Bidder's Fax Number: $\qquad$
Date of Bid Opening: $\qquad$
PROJECT ID:
Vendex Compliance: To demonstrate compliance with Vendex requirements, the Bidder shall complete either Section (1) or Section (2) below, whichever applies.
(1) Submission of Vendex Questionnaires to MOCS: By signing in the space provided below, the Bidder certifies that as of the date specified below, the Bidder has submitted Vendex Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, $9^{\text {th }}$ Floor, New York, New York 10007.

Date of Submission: $\qquad$

By: $\qquad$
(Signature of Partner or corporate officer)

Print Name: $\qquad$
(2) Submission of Certification of No Change to DDC: By signing in the space provided below, the Bidder certifies that it has read the instructions in a "Vendor's Guide to Vendex" and that such instructions do not require the Bidder to submit Vendex Questionnaires. The Bidder has completed TWO ORIGINALS of the Certification of No Change set forth on the next page of this Bid Booklet.

By: $\qquad$
Print Name: $\qquad$
(NO TEXT ON THIS PAGE)

## Certificate of No Change Form

- Please submit two completed forms. Copies will not be accepted.
- Please send both copies to the agency that requested it, unless you are advised to send it directly to the Mayor's Office of Contract Services (MOCS).
- A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.
- A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges

I, $\qquad$ , being duly sworn, state that I have read

## Enter Your Name

and understand all the items contained in the vendor questionnaire and any submission of change as identified on page one of this form and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate; and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) and any submission of change identified on page two of this form have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that the City of New York will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

## Vendor Questionnaire This section is required.

This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.
Name of Submitting Entity: $\qquad$
Vendor's Address:
Vendor's EIN or TIN: $\qquad$ Requesting Agency: $\qquad$
Are you submitting this Certification as a parent? (Please circle one) Yes No Signature date on the last full vendor questionnaire signed for the submitting vendor: $\qquad$ Signature date on change submission for the submitting vendor: $\qquad$

## Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.

Date of signature on last full Principal Questionnaire

Date(s) of signature on submission of change

## 5

6Check if additional changes were submitted and attach a document with the date of additional submissions.

## Certification This section is required.

This form must be signed and notarized. Please complete this twice. Copies will not be accepted.
Certified By:
$\qquad$

Title

Name of Submitting Entity

Signature

## Date

## Notarized By:

Sworn to before me on:


## Certificate of No Change Form

- Please submit two completed forms. Copies will not be accepted.
- Please send both copies to the agency that requested it, unless you are advised to send it directly to the Mayor's Office of Contract Services (MOCS).
- A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.
- A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges

I, $\qquad$ , being duly sworn, state that I have read

## Enter Your Name

and understand all the items contained in the vendor questionnaire and any submission of change as identified on page one of this form and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate; and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) and any submission of change identified on page two of this form have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.
$I$ understand that the City of New York will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

## Vendor Questionnaire This section is required.

This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.
Name of Submitting Entity:
Vendor's Address:
Vendor's EIN or TIN: $\qquad$ Requesting Agency: $\qquad$
Are you submitting this Certification as a parent? (Please circle one) Yes No
Signature date on the last full vendor questionnaire signed for the submitting vendor: $\qquad$
Signature date on change submission for the submitting vendor: $\qquad$

## Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.

Date of signature
Principal Name on last full Principal
Questionnaire

Date(s) of signature on submission of change

Check if additional changes were submitted and attach a document with the date of additional submissions.

## Certification This section is required.

This form must be signed and notarized. Please complete this twice. Copies will not be accepted.
Certified By:

Name (Print)

Title

Name of Submitting Entity

## Signature

Date
Notarized By:

Notary Public
County License Issued
License Number

Sworn to before me on:

> Date

## IRAN DIVESTMENT ACT COMPLIANCE RIDER

## FOR NEW YORK CITY CONTRACTORS

The Iran Divestment Act of 2012, effective as of April 12, 2012, is codified at State Finance Law ("SFL") §165-a and General Municipal Law ("GML") §103-g. The Iran Divestment Act, with certain exceptions, prohibits municipalities, including the City, from entering into contracts with persons engaged in investment activities in the energy sector of Iran. Pursuant to the terms set forth in SFL §165a and GML $\S 103-\mathrm{g}$, a person engages in investment activities in the energy sector of Iran if:
(a) The person provides goods or services of twenty million dollars or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
(b) The person is a financial institution that extends twenty million dollars or more in credit to another person, for forty-five days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to paragraph (b) of subdivision three of Section 165-a of the State Finance Law and maintained by the Commissioner of the Office of General Services.

A bid or proposal shall not be considered for award nor shall any award be made where the bidder or proposer fails to submit a signed and verified bidder's certification.

Each bidder or proposer must certify that it is not on the list of entities engaged in investment activities in Iran created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. In any case where the bidder or proposer cannot certify that they are not on such list, the bidder or proposer shall so state and shall furnish with the bid or proposal a signed statement which sets forth in detail the reasons why such statement cannot be made. The City of New York may award a bid to a bidder who cannot make the certification on a case by case basis if:
(1) The investment activities in Iran were made before the effective date of this section (i.e., April 12, 2012), the investment activities in Iran have not been expanded or renewed after the effective date of this section and the person has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran: or
(2) The City makes a determination that the goods or services are necessary for the City to perform its functions and that, absent such an exemption, the City would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

# BIDDER'S CERTIFICATION OF COMPLIANCE WITH IRAN DIVESTMENT ACT 

Pursuant to General Municipal Law §103-g, which generally prohibits the City from entering into contracts with persons engaged in investment activities in the energy sector of Iran, the bidder/proposer submits the following certification:

## [Please Check One]

## BIDDER'S CERTIFICATION

$\square \quad$ By submission of this bid or proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer 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, that each bidder/proposer is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.
$\square \quad$ I am unable to certify that my name and the name of the bidder/proposer does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth in detail why I cannot so
certify.

Dated: $\qquad$ , New York
$\qquad$ , 20 $\qquad$ SINATURE

PRINTED NAME

Sworn to before me this
TITLE
$\qquad$ day of $\qquad$ , 20 $\qquad$

## Notary Public

Dated:

# THE CITY OF NEW YORK DEPARTMENT OF SMALL BUSINESS SERVICES DIVISION OF LABOR SERVICES CONTRACT COMPLIANCE UNIT <br> 110 WILLIAMS STREET <br> NEW YORK, NEW YORK 10038 <br> PHONE: (212) 513-6323 <br> FAX: <br> (212) 618-8879 

## CONSTRUCTION

## EMPLOYMENT

## REPORT

(NO TEXT ON THIS PAGE)

The City of New York
Department of Small Business Services
Division of Labor Services
Contract Compliance Unit
110 William Street
New York, New York 10038
Phone: (212) 513-6323
Fax: (212) 618-8879

## CONSTRUCTION EMPLOYMENT REPORT

 INSTRUCTIONS
## WHO MUST FILE A CONSTRUCTION EMPLOYMENT REPORT

A Construction Employment Report (ER) must be filed if you meet the following conditions:


| Federal/Federally assisted | Prime and <br> subcontractors | $\$ 10,000$ or greater |
| :---: | :---: | :---: |
| Construction Employment Report |  |  |
|  | Prime contractor | $\$ 1,000,000$ or greater |

## Prime Contractor:

- A general contractor or construction manager selected to perform work on a construction project funded (in whole or in part) by the federal government with a proposed contract value of $\$ 10,000$ or more.
- A general contractor or construction manager selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of $\$ 1,000,000$ or more.


## Subcontractor:

- A subcontractor selected to perform work on a construction project funded (in whole or in part) by the federal government with a proposed contract value of $\$ 10,000$ or more.
- A subcontractor selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of $\$ 750,000$ or more.
- A subcontractor selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of less than $\$ 750,000$ must submit a "Less than $\$ 750,000$ " certificate.


## WHERE TO FILE

Employment Reports must be filed with the City agency awarding the contract. If you are a contractor or subcontractor who will be working for a private developer in receipt of funding or assistance from the City, the ER must be filed with the City agency with jurisdiction over the developer's project.

## DLS REVIEW PROCESS

In accordance with Executive Order 50 (EO 50), upon receipt by DLS of a completed ER, DLS conducts a review of the contractor's current employment policies, practices and procedures, as well as perform a statistical analysis of the contractor's workforce, if necessary. The process is as follows:

1. Within five (5) business days, DLS will review the ER for completeness and accuracy. If any information is omitted or incorrect, or if necessary documents are not submitted, the submission shall be deemed incomplete and DLS will inform the contractor. The substantive compliance review does not commence until the submission is complete. An incomplete submission will delay the review process and may preclude or interrupt the contract approval.
2. If the ER submission is complete, the compliance review will proceed, resulting in one of the following:

## Certificate of Approval

The contractor is found to be in compliance with all applicable laws and regulations. The approval is valid for 36 months.

## Continued Approval Certificate

The contractor has been issued a Certificate of Approval in the previous 36 months which is good for the applicable contract.

## Conditional Certificate of Compliance

The contractor is required to take corrective actions in order to be in compliance with EO 50. The contractor must meet the conditions within one month of the issue of the Conditional Certificate.

Determination of Nonperformance
The contractor has failed to take the required corrective actions stipulated in the Conditional Certificate. A determination of nonperformance may prevent a contractor from receiving an award of a contract.

## HOW TO COMPLETE THE EMPLOYMENT REPORT

## Contents

General Information
Part I: Contractor/Subcontractor Information
Part II: Employment Policies and Practices
Part III: Contract Bid Information and Projected and Current Workforce Forms
Signature Page
PARTI: CONTRACTOR/SUBCONTRACTOR INFORMATION
Questions 7-11: Please provide the required contact information for your company. All contracts must have a designated Equal Employment Officer.

Question 12: If you are a subcontractor, you must state the name of the contractor for whom you are providing the construction services.

Question 13: Please provide the number of permanent employees in your company.
Question 14a-g: $\quad$ The Project Identification Number (PIN) and the Contract Registration ID Number (CT\#) can be obtained from the City agency. Provide a description of the trade work you will perform on this project and the address where the work will be performed. Subcontractors can obtain this information from the contract they have with the prime contractor.

Questions 15-18: If your company has received a valid Certificate of Approval within the past 36 months, been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), or if your company has submitted an ER for a different contract for which you have not yet received a compliance certificate, then you only need to complete and submit the following:

- General Information section
- Part I-Contractor/Subcontractor Information
- Form B - Projected Workforce
- Signature Page

If your company is currently waiting for an approval on another contract previously submitted, be certain to identify the date on which you submitted the completed Employment Report, the name of the City contracting agency with which the contract was made, and the name and telephone number of the person to whom the Employment Report was submitted.

If your company was issued a Conditional Certificate of Approval, all required corrective actions must have been taken or DLS will not issue a Continued Certificate.

Question 18: If the company was audited by the OFCCP, also provide the following:

- Identify the reviewing OFCCP office by its name and address
- If an unconditional certificate of compliance was issued by the OFCCP, attach a copy of the certificate in lieu of completing Parts II and III;
- Include copies of all corrective actions and documentation of OFCCP's performance; and
- Provide a copy of all stated OFCCP findings.

Question 19: Please provide a copy of any Collective Bargaining Agreement(s) which is negotiated through an employer trade association on behalf of your organization or any of its affiliates.

## PART II: EMPLOYMENT POLICIES AND PRACTICES

Remember to label all documents with the question number for which they are submitted.
Questions 20a-j: You must respond to the questions as to whether or not your firm has documents reflecting written policies, benefits and procedures. If so, then you must identify by name each document in which the policy(ies), procedure(s) and benefit(s) is located and submit copies of all of the document(s). If your firm follows unwritten practices or procedures, include an explanation of how they operate. Please submit the most current document(s), including all applicable amendments. Label each document and/or unwritten practice according to the question to which it corresponds (e.g. 20a, 20b, etc.)

Questions 21a-h: Inquires about the manner/methods by which you comply with the requirements of the Immigration Reform and Control Act of 1986 (IRCA).

Question 22: Inquires into where and how I-9 forms are maintained and stored.
Questions 23a-e: Inquires into whether or not there is a requirement that an applicant or employee be subjected to a medical examination at any given time. Copes of the medical information questionnaire and instructions must be submitted with the Employment Report.

Question 24: Indicate the existence and location of all statements of your firm's Equal Employment Opportunity policy and attach a copy of each statement.

Question 25: $\quad$ Submit any current Affirmative Action Plan(s) created pursuant to Executive Order 11246.
Question 26: If your firm or collective bargaining agreement has an internal grievance procedure, indicate this and submit a copy of the policy and procedure. If unwritten, explain its nature and operation. Explain how your firm's procedure addresses EEO complaints.

Question 27: If your employees have used the procedure in the last three (3) years, please submit an explanation in the format indicated below:

| 1. Number of <br> complaint(s) | 2. Nature of the <br> complaint(s) | 3. Position(s) of the <br> complainant(s) | 4. Was an investigation <br> conducted? <br> $\mathrm{Y} / \mathrm{N}$ | 5. Current status of the <br> disposition |
| :---: | :---: | :---: | :---: | :---: |

Page 3

Question 28: Indicate whether in the past three (3) years complaints have been filed with a court of law or administrative agency, naming your company as a defendant (or respondent) in a complaint alleging violation of any anti-discrimination or affirmative action laws. If yes, develop and submit a log to show, for each administrative/and or judicial action filed, the following information:

| 1. Name(s) of <br> complainant(s) | 2. Administrative agency <br> or court in which action <br> was filed | 3. Nature of the <br> complaint(s) | 4. Current status | 5. If not pending, the <br> complaint's disposition |
| :---: | :---: | :---: | :---: | :---: |

Question 29: Identify each job for which a physical qualification exists. Identify and explain the physical qualification(s) for each stated job. Submit job descriptions for each job and the reasons for the qualifications.

Question 30: Identify each job for which there exists any qualification related to age, race, color, national origin, sex, creed, disability, marital status, sexual orientation or citizenship status. Identify and explain the specific related qualification for each job stated. Submit job descriptions for each job and the reasons for the qualifications.

## PART III: CONTRACT BID INFORMATION AND PROJECTED AND CURRENT WORKFORCE FORMS

## FORM A: CONTRACT BID INFORMATION - USE OF SUBCONTRACTORS/TRADES

Your projections for the utilization of subcontractors on the proposed contract are to be provided in this section. A chart has been provided for the identification of subcontractors. Information is to be provided to the extent known at the time the ER is filed for review by DLS. If the subcontractor's name is unknown, then write "unknown". Under "ownership", enter the appropriate race/ethnic and gender code. If the contract is federally funded or assisted and the subcontractor is being utilized in accordance with applicable federal requirements with respect to Minority Business Enterprise or Woman Business Enterprise requirements, enter the appropriate code. This will also apply to state funded contracts with similar requirements for minority and female owned businesses.

## FORM B: PROJECTED WORKFORCE FOR WORK TO BE PERFORMED ON THIS PROJECT

For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification in the charts provided.

## FORM C: CURRENT WORKFORCE FOR WORK TO BE PERFORMED ON THIS PROJECT

For each trade currently engaged by your company for all work performed in NYC, enter the current workforce for Males and Females by trade classification in the charts provided.

## SIGNATURE PAGE

The signatory of this Employment Report and all other documents submitted to DLS must be an official authorized to enter into a binding legal agreement. The signature page must be completed in its entirety and notarized. Only original signatures will be accepted.

The City of New York Department of Small Business Services
Division of Labor Services Contract Compliance Unit
110 William Street, New York, New York 10038
Phone: (212) 513-6323
Fax: (212) 618-8879

## CONSTRUCTION EMPLOYMENT REPORT

## GENERAL INFORMATION

1. Your contractual relationship in this contract is: Prime contractor_X Subcontractor_ $\qquad$
1a. Are MNBE goals attached to this project? Yes $\qquad$ No $\qquad$
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:

Minority Owned Business Enterprise
Women Owned Business Enterprise
Disadvantaged Business Enterprise

## ___Emerging Business Enterprise

2a. If you are certified as an MBE, WBE, LBE, EBE or DBE, what city/state agency are you certified with? $\qquad$ Are you DBE certified? Yes $\qquad$ No $\qquad$
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes $\qquad$ No $\qquad$
4. Is this project subject to a project labor agreement? Yes $\qquad$ No $\qquad$
5. Are you a Union contractor? Yes ___ No ___ If yes, please list which local(s) you affiliated with $\qquad$
6. Are you a Veteran owned company? Yes $\qquad$ No $\qquad$

## PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

7. 

Employer Identification Number or Federal Tax I.D.
Email Address
8.

## Company Name

9. 

Company Address and Zip Code
10.
Chief Operating Officer
Telephone Number
11.

Designated Equal Opportunity Compliance Officer
(If same as Item \#10, write "same")

Telephone Number
12.

Name of Prime Contractor and Contact Person
(If same as Item \#8, write "same")
13. Number of employees in your company: $\qquad$
14. Contract information:
(a)
Contracting Agency (City Agency)
(b)
Contract Amount
(c)
Procurement Identification Number (PIN)
(e)
Projected Commencement Date
(d)
Contract Registration Number (CT\#)
(f)
Projected Completion Date
(g) Description and location of proposed contract:
$\qquad$
$\qquad$
15. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes $\qquad$ No $\qquad$
If yes, attach a copy of certificate.
16. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes $\qquad$ No $\qquad$
If yes, attach a copy of certificate.
NOTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION WITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR CONDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.
17. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate?
Yes $\qquad$ No

If yes,
Date submitted: $\qquad$
Agency to which submitted: $\qquad$
Name of Agency Person: $\qquad$
Contract No: $\qquad$
Telephone: $\qquad$
18. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes $\qquad$ No $\qquad$
If yes,
(a) Name and address of OFCCP office.
(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months? Yes $\qquad$ No $\qquad$
If yes, attach a copy of such certificate.
(c) Were any corrective actions required or agreed to? Yes $\qquad$ No $\qquad$
If yes, attach a copy of such requirements or agreements.
(d) Were any deficiencies found? Yes $\qquad$ No $\qquad$
If yes, attach a copy of such findings.
19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes $\qquad$ No $\qquad$
If yes, attach a list of such associations and all applicable CBA's.

## PART II: DOCUMENTS REQUIRED

20. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.
$\qquad$ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
$\qquad$ (b) Disability, life, other insurance coverage/description
$\qquad$ (c) Employee Policy/Handbook
(d) Personnel Policy/Manual
(e) Supervisor's Policy/Manual
(f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
_ (g) Collective bargaining agreement(s).
__ (h) Employment Application(s)
$\qquad$ (i) Employee evaluation policy/form(s).
$\qquad$ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?
$\qquad$
21. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an l-9 Form?
(a) Prior to job offer

Yes__ No
(b) After a conditional job offer

Yes No O-
(c) After a job offer
(d) Within the first three days on the job
(e) To some applicants
(f) To all applicants
(g) To some employees
(h) To all employees

Yes No -
Yes No No Yes No Yes No No Yes Yes $\qquad$ No $\qquad$ -_
22. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.
23. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes $\qquad$ No $\qquad$
If yes, is the medical examination given:
(a) Prior to a job offer
(b) After a conditional job offer
(c) After a job offer
(d) To all applicants
(e) Only to some applicants
$\qquad$
Yes__ No $\qquad$
Yes No $\qquad$ Yes No $\qquad$
Yes No $\qquad$

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.
$\qquad$
24. Do you have a written equal employment opportunity (EEO) policy? Yes $\qquad$ No $\qquad$
If yes, list the document(s) and page number(s) where these written policies are located.
$\qquad$
$\qquad$
25. Does the company have a current affirmative action plan(s) (AAP)
___ Minorities and Women
__Individuals with handicaps
—_OOther. Please specify $\qquad$
26. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes $\qquad$ No $\qquad$
If yes, please attach a copy of this policy.
If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.
$\qquad$
27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes $\qquad$ No $\qquad$
If yes, attach an internal complaint log. See instructions.
28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any antidiscrimination or affirmative action laws? Yes $\qquad$ No $\qquad$
If yes, attach a log. See instructions.
29. Are there any jobs for which there are physical qualifications? Yes $\qquad$ No $\qquad$
If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).
30. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes $\qquad$ No $\qquad$
If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

## SIGNATURE PAGE

I, (print name of authorized official signing) $\qquad$ hereby certify that the information submitted herewith is true and complete to the best of my knowledge and belief and submitted with the understanding that compliance with New York City's equal employment requirements, as contained in Chapter 56 of the City Charter, Executive Order No. 50 (1980), as amended, and the implementing Rules and Regulations, is a contractual obligation. I also agree on behalf of the company to submit a certified copy of payroll records to the Division of Labor Services on a monthly basis.

Contractor's Name

| Name of person who prepared this Employment Report | Title |
| :--- | :--- |

Name of official authorized to sign on behalf of the contractor Title

Telephone Number

Signature of authorized official
Date
If contractors are found to be underutilizing minorities and females in any given trade based on Chapter 56 Section 3H, the Division of Labor Services reserves the right to request the contractor's workforce data and to implement an employment program.

Contractors who fail to comply with the above mentioned requirements or are found to be in noncompliance may be subject to the withholding of final payment.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/and or criminal prosecution.

To the extent permitted by law and consistent with the proper discharge of DLS' responsibilities under Charter Chapter 56 of the City Charter and Executive Order No. 50 (1980) and the implementing Rules and Regulations, all information provided by a contractor to DLS shall be confidential.

## Only original signatures accepted.

Sworn to before me this $\qquad$ day of $\qquad$ 20 $\qquad$

FORM A. CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES
Do you plan to subcontractor work on this contract? Yes__ No__
If yes, complete the chart below. $\div$
1.
2.
NOTE: All proposed subcontractors with a subcontract in excess of $\mathbf{\$ 7 5 0 , 0 0 0}$ must complete an Employment Report for review and approval before the contract may be awarded and

| SUBCONTRACTOR'S <br> NAME* | OWNERSHIP (ENTER <br> APPROPRIATE CODE <br> LETTERS BELOW) | WORK TO BE <br> PERFORMED BY <br> SUBCONTRACTOR | TRADE PROJECTED FOR <br> USE BY <br> SUBCONTRACTOR | PROJECTED DOLLAR <br> VALUE OF <br> SUBCONTRACT |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

*If subcontractor is presently unknown, please enter the trade (craft name).
OWNERSHIP CODES
W: White
B: Black
A: Asian
N: Native American
Page 8
Revised 8/13
FOR OFFICIAL USE ONLY: File No.
FORM B: PROJECTED WORKFORCE
For each trade to be engaged by your company for this project, enter the projected workforce for
the charts below.
the

[^1]
What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

| What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)? |
| :--- |
|  |
| Page 9 |
| Revised $8 / 13$ |
| FOR OFFICIAL USE ONLY: File No. |

FOR OFFICIAL USE ONLY: File No.
FORM B: PROJECTED WORKFORCE

FEMALES


| Union Affiliation, if applicable |
| :--- |
| Total (Col. \#1-10): |
| Total Minority, Male \& Female <br> (Col. \#2,3,4,5,7,8,9, \& 10): <br> Total Female <br> (Col. \#6-10): |



| Union Affiliation, if applicable |
| :--- |
| Total (Col. \#1-10): |
| Total Minority, Male \& Female <br> (Col. \#2,3,4,5,7,8,9, \& 10): <br> Total Female <br> (Col. \#6-10): |


| Union Affiliation, if applicable |
| :--- |
| Total (Col. \#1-10): |
| Total Minority, Male \& Female <br> (Col. \#2,3,4,5,7,8,9, \& 10): <br> Total Female <br> (Col. \#6-10): |


| Union Affiliation, if applicable |
| :--- |
| Total (Col. \#1-10): |
| Total Minority, Male \& Female <br> (Col. \#2,3,4,5,7,8,9, \& 10): <br> Total Female <br> (Col. \#6-10): |


| Union Affiliation, if applicable |
| :--- |
| Total (Col. \#1-10): |
| Total Minority, Male \& Female <br> (Col. \#2,3,4,5,7,8,9, \& 10): <br> Total Female <br> (Col. \#6-10): |


FORM C: CURRENT WORKFORCE
TRADE CLASSIFICATION CODES
For each trade currently engaged by your company for
all work performed in New York City, enter the current workforce for Males and Females by trade classification on the charts below.

(J) Journeylevel Workers
(H) Helper
(TOT) Total by Column
(H) Helper
(TOT) Total by Column
Trade:
Union Affiliation, if applicable
Total (Col. \#1-10):

| Total Minority, Male \& Female |
| :--- |
| (Col. \#2,3,4,5,7,8,9, \& 10): |
| Total Female |
| (Col. \#6 - 10): |

Page 11
Revised 8/13
FOR OFFICIAL USE ONLY: File No



Union Affiliation, if applicable
Total Minority, Male \& Female (Col. \#2,3,4,5,7,8,9, \& 10):


Page 12
Revised $8 / 33$ USE ONLY: File No.
(NO TEXT ON THIS PAGE)

The City of New York Department of Small Business Services
Division of Labor Services Contract Compliance Unit 110 William Street, New York, New York 10038

Phone: (212) 513-6323
Fax: (212) 618-8879
CONSTRUCTION EMPLOYMENT REPORT

## GENERAL INFORMATION

1. Your contractual relationship in this contract is: Prime contractor___ Subcontractor_x

1a. Are MNBE goals attached to this project? Yes $\qquad$ No $\qquad$
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:
$\qquad$ Minority Owned Business Enterprise
Locally Based Business Enterprise
Women Owned Business Enterprise Emerging Business Enterprise

__Disadvantaged Business Enterprise

2a. If you are certified as an MBE, WBE, LBE, EBE or DBE, what city/state agency are you certified with? $\qquad$ Are you DBE certified? Yes $\qquad$ No $\qquad$
3. Please indicate if you would like assistance from SBS in identifying certified MNWBEs for contracting opportunities: Yes $\qquad$ No $\qquad$
4. Is this project subject to a project labor agreement? Yes $\qquad$ No $\qquad$
5. Are you a Union contractor? Yes $\qquad$ No $\qquad$ If yes, please list which local(s) you affiliated with $\qquad$
6. Are you a Veteran owned company? Yes $\qquad$ No $\qquad$

## PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

7. 

Employer Identification Number or Federal Tax I.D.
8.

Company Name
9.

Company Address and Zip Code
10.
Chief Operating Officer Telephone Number
11.
Designated Equal Opportunity Compliance Officer Telephone Number (If same as Item \#10, write "same")
12.

Name of Prime Contractor and Contact Person
(If same as Item \#8, write "same")
13. Number of employees in your company: $\qquad$
14. Contract information:
(a)
Contracting Agency (City Agency)
(b)
Contract Amount
(c)
Procurement Identification Number (PIN)
(e)
Projected Commencement Date
(d)
Contract Registration Number (CT\#)
(f)
Projected Completion Date
(g) Description and location of proposed contract:
15. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes $\qquad$ No $\qquad$
If yes, attach a copy of certificate.
16. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes $\qquad$ No $\qquad$
If yes, attach a copy of certificate.

## NOTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION WITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR CONDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.

17. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate?
Yes $\qquad$ No $\qquad$ If yes,
Date submitted: $\qquad$
Agency to which submitted: $\qquad$
Name of Agency Person: $\qquad$
Contract No: $\qquad$
Telephone: $\qquad$
18. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes $\qquad$ No $\qquad$
If yes,
$\qquad$
(a) Name and address of OFCCP office.
(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months? Yes $\qquad$ No $\qquad$ If yes, attach a copy of such certificate.
(c) Were any corrective actions required or agreed to? Yes $\qquad$ No $\qquad$
If yes, attach a copy of such requirements or agreements.
(d) Were any deficiencies found? Yes $\qquad$ No $\qquad$
If yes, attach a copy of such findings.
19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes $\qquad$ No $\qquad$
If yes, attach a list of such associations and all applicable CBA's.

## PART II: DOCUMENTS REQUIRED

20. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.
__ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
_ (b) Disability, life, other insurance coverage/description
_ (c) Employee Policy/Handbook
_ (d) Personnel Policy/Manual
(e) Supervisor's Policy/Manual
__ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
_ (g) Collective bargaining agreement(s).
__ (h) Employment Application(s)
__ (i) Employee evaluation policy/form(s).
__ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?
21. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an l-9 Form?
(a) Prior to job offer
(b) After a conditional job offer
(c) After a job offer
(d) Within the first three days on the job
(e) To some applicants
(f) To all applicants
(g) To some employees
(h) To all employees

| Yes | No |
| :---: | :---: |
| Yes | No |
| Yes | No |
| Yes | No |
| Yes | No |
| Yes | No |
| Yes | No |
| Yes | No |

22. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.
23. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes $\qquad$ No $\qquad$
If yes, is the medical examination given:
(a) Prior to a job offer
(b) After a conditional job offer
(c) After a job offer
(d) To all applicants
(e) Only to some applicants
$\qquad$ No $\qquad$
$\qquad$
$\qquad$ Yes $\qquad$ No $\qquad$ Yes No $\qquad$
Yes $\qquad$ No

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.
24. Do you have a written equal employment opportunity (EEO) policy? Yes $\qquad$ No $\qquad$
If yes, list the document(s) and page number(s) where these written policies are located.
$\qquad$
25. Does the company have a current affirmative action plan(s) (AAP)
___ Minorities and Women
___Individuals with handicaps
__O_Other. Please specify $\qquad$
26. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes $\qquad$ No $\qquad$
If yes, please attach a copy of this policy.
If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.
27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes $\qquad$ No $\qquad$ If yes, attach an internal complaint log. See instructions.
28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the com $\qquad$ No $\qquad$ discrimination or affirmative action laws? Yes

If yes, attach a log. See instructions.
29. Are there any jobs for which there are physical qualifications? Yes $\qquad$ No $\qquad$ If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).
30. Are there any jobs for which there are age, race, color, national orig $\qquad$ No $\qquad$ marital status, sexual orientation, or citizenship qualifications? If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).
$\qquad$

## SIGNATURE PAGE

I, (print name of authorized official signing) $\qquad$ hereby certify that submitted with the understerewith is true and complete to the best of my knowledge and belief and requirements, as contained in Chapat compliance with New York City's equal employment amended, and the implementing Rules and Reguly Charter, Executive Order No. 50 (1980), as behalf of the company to submit a certified copy of pations, is a contractual obligation. I also agree on a monthly basis.

Contractor's Name

Name of person who prepared this Employment Report Title

Name of official authorized to sign on behalf of the contractor Title
Telephone Number

Signature of authorized official Date
If contractors are found to be underutilizing minorities and females in any given trade based on Chapter 56 Section $3 H$, the Division of Labor Services reserves the right to request the contractor's workforce data and to implement an employment program.

Contractors who fail to comply with the above mentioned requirements or are found to be in noncompliance may be subject to the withholding of final payment.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of fut contracts for a period of up to five years. Further, such falsification may and in disapproval of future criminal prosecution.

To the extent permitted by law and consistent with the proper discharge of DLS' responsibilities under Charter Chapter 56 of the City Charter and Executive Order No. 50 (1980) and the implementing Rules and Regulations, all information provided by a contractor to DLS shall be confidential.

## Only original signatures accepted.

Sworn to before me this $\qquad$ day of $\qquad$ 20 $\qquad$

Notary Public
Date

Page 6
Revised 8/13
FOR OFFICIAL USE ONLY: File No
CONTRACT BID INFORMATION: USE OF SUBCONTRACTORSITRADES

NOTE: All proposed subcontractors with a subcontract in excess of $\mathbf{\$ 7 5 0 , 0 0 0}$ must complete an Employment Report for review and approval before the contract may be awarded and work commences.

| SUBCONTRACTOR'S <br> NAME* | OWNERSHIP (ENTER <br> APPROPRIATE CODE <br> LETTERS BELOW) | WORK TO BE <br> PERFORMED BY <br> SUBCONTRACTOR | TRADE PROJECTED FOR <br> USE BY <br> SUBCONTRACTOR | PROJECTED DOLLAR <br> VALUE OF <br> SUBCONTRACT |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

*If subcontractor is presently unknown, please enter the trade (craft name).
OWNERSHIP CODES
W: White
B: Black
H: Hispanic
A: Asian
F: Female
Page 8
Revised
FOR OFFICIAL USE ONLY: File No.
FORM B: PROJECTED WORKFORCE
For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification on the charts below.
FEMALES


TRADE CLASSIFICATION CODES
(J) Journeylevel Workers
(H) Helper
(TOT) Total by Column
Trade:
Union Affiliation, if applicable
Total Minority, Male \& Female (Col. \#2,3,4,5,7,8,9, \& 10):
Total Female
(Col. \#6 - 10):
FOR OFFICIAL USE ONLY: File No.
FORM B: PROJECTED WORKFORCE

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?
FOR OFFICIAL USE ONLY: File No
FORM C: CURRENT WORKFORCE
TRADE CLASSIFICATION CODES
(J) Journeylevel Workers
(H) Helper
(TOT) Total by Column
_

## Trade:

## Union Affiliation, if applicable

Total Minority, Male \& Female (Col. \#2,3,4,5,7,8,9, \& 10):
Total Female
(Col. \#6-10):
FORM C: CURRENT WORKFORCE


Trade:
Union Affiliation, if applicable

Total (Col. \#1-10):

| Total Minority, Male \& Female |
| :--- |
| (Col. \#2,3,4,5,7,8,9, \& 10): |
| $\begin{array}{l}\text { Total Female } \\ \text { (Col. \#6 - 10): }\end{array}$ |


| Total Minority, Male \& Female |
| :--- |
| (Col. \#2,3,4,5,7,8,9, \& 10): |
| $\begin{array}{l}\text { Total Female } \\ \text { (Col. \#6 - 10): }\end{array}$ |



| Total Minority, Male \& Female |
| :--- |
| (Col. \#2,3,4,5,7,8,9, \& 10): |
| $\begin{array}{l}\text { Total Female } \\ \text { (Col. \#6 - 10): }\end{array}$ |

_-_
 $\longrightarrow$

Page 12
$\qquad$
What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?
Page 12
Revised $8 / 13$
For OFFICIAL USE ONLY: File No.
(NO TEXT ON THIS PAGE)

The City of New York Department of Small Business Services
Division of Labor Services Contract Compliance Unit
110 William Street, New York, New York 10038
Phone: (212) 513-6323 Fax: (212) 618-8879
Date $\qquad$ File Number $\qquad$

## LESS THAN $\$ 750,000$ SUBCONTRACT CERTIFICATE (CITY, STATE AND ICIP ONLY)

Are you currently certified as one of the following? Please check yes or no:
$\qquad$ WBE Yes__No $\qquad$ LBE Yes__No__
$\qquad$ EBE Yes $\qquad$ No $\qquad$
If you are certified as an MBE, WBE, LBE, EBE or DBE, what city/state agency are you certified with?

Please check one of the following if your firm would like information on how to certify with the City of New York as a:
__Minority Owned Business Enterprise
__Locally based Business Enterprise
Women Owned Business Enterprise
___Emerging Business Enterprise
Disadvantaged Business Enterprise

Company Name
Employer Identification Number or Federal Tax I.D

Company Address and Zip Code

Contact Person (First Name, Last Name)
Telephone Number

Fax Number
E-mail Address
Description and location of proposed subcontract:

Are you a Union contractor? Yes $\qquad$ No $\qquad$ If yes, please list which local(s) you affiliated with

Are you a Veteran owned company? Yes $\qquad$ No $\qquad$

[^2][^3]Block and Lot Number
(ICIP projects only)
I, (print name of authorized official signing) $\qquad$ hereby certify that I am authorized by the above-named subcontractor to certify that said subcontractor's proposed contract with the above named owner or City agency is less than $\$ 750,000$. This affirmation is made in accordance with NYC Charter Chapter 56, Executive Order No. 50 (1980) and the implementing Rules.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/and or criminal prosecution.


Department of Design and Construction
INFRASTRUCTURE DIVISION BUREAU OF DESIGN

## VOLUME 1 OF 3

PROJECT ID: HWR100PAD<br>HYLAN BOULEVARD<br>BUS PADS FOR SELECT BUS SERVICE<br>INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK

Contractor.

Dated , 20

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

30-30 THOMSON AVENUE
LONG ISLAND CITY, NEW YORK 11101-3045
TELEPHONE (718) 391-1000
WEBSITE www.nyc.gov/buildnyc

## VOLUME 2 OF 3

INFORMATION FOR BIDDERS CONTRACT

## PERFORMANCE AND PAYMENT BONDS

 PREVAILING WAGE SCHEDULEFOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

## PROJECT ID: HWR100PAD

HYLAN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK


FOR THE DEPARTMENT OF TRANSPORTATION
PREPARED BY
GANDHI ENGINEERING INC.

## THE CITY OF NEW YORK

DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

30-30 THOMSON AVENUE
LONG ISLAND CITY, NEW YORK 11101-3045
TELEPHONE (718) 391-1000
WEBSITE www.nyc.gov/buildnyc

## VOLUME 2 OF 3

INFORMATION FOR BIDDERS CONTRACT
PERFORMANCE AND PAYMENT BONDS PREVAILING WAGE SCHEDULE

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIR

## PROJECT ID:



FOR THE DEPARTMENT OF TRANSPORTATION PREPARED BY

July 1, 2015

# HIRING AND EMPLOYMENT RIDER: 

## HIRENYC AND REPORTING REOUIREMENTS

## Introduction

This Rider shall apply to all contracts for goods, services, and construction with a value of one million dollars ( $\$ 1,000,000.00$ ) or more, provided, however, that certain requirements of the Rider shall only apply as indicated below. This Rider addresses the HireNYC process, including reporting obligations under the HireNYC process, and certain other reporting requirements imposed by law. In general; the HireNYC process under this Rider requires the Contractor to enroll with the HireNYC portal for the City of New York ("the City") found within the Department of Small Business Services's ("SBS") website, to disclose all entry to mid-level job opportunities described in this Rider arising from this contract and located in New York City, and to agree to interview qualified candidates from HireNYC for those opportunities.

## HireNYC Requirements

A. 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.

## B. Job Posting Requirements

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://Iabor.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.

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.

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 and each anniversary date.

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 Rider shall be interpreted so as to require the Contractor to employ any particular worker.

In addition, the provisions of this Rider 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 Section A, above, and, if such positions subsequently become open, then the remaining provisions of this Rider will apply.

## C. Breach and Liquidated Damages

If the Contractor fails to comply with the terms of the contract and this Rider (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 contracting agency may assess liquidated damages in the amount of two-thousand five hundred dollars $(\$ 2,500.00)$ per breach. For all other events of noncompliance with the terms of this Rider, 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 Rider during the term of the contract, the City may hold the Contractor in default of this contract.

## 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.

## Other Reporting Requirements

The Contractor shall report to the City, on a monthly basis, all information reasonably requested by the City that is necessary for the City to comply with any reporting requirements imposed by law or rule, 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 rule, or as otherwise requested by the City.

## Construction Requirements

Construction contractors shall comply with the HireNYC requirements set forth above for all non-trades jobs (e.g., for an administrative position arising out of the work of the contract and located in New York City) as set forth above.

In addition, construction contractors shall reasonably cooperate with SBS and the City on specific outreach events, including Hire on the Spot events, for the hiring of trades workers for the work of this contract.

Further, this contract shall be subject to a project labor agreement if so required elsewhere in this contract.

## Federal Hiring Requirements

The Contractor shall comply with all federal hiring requirements as may be set forth elsewhere in this contract, including, as applicable:

- 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.
- 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.
(NO TEXT ON THIS PAGE)


## PAID SICK LEAVE LAW CONTRACT RIDER

## Introduction and General Provisions

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 time. ${ }^{1}$ Contractors of the City of New York or of other governmental entities may be required to provide sick time pursuant to the PSLL.

The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City's Department of Consumer Affairs ("DCA"); DCA's rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York ("Rules").

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

Contractor must notify the Agency Chief Contracting Officer of the City agency or other entity 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 agreement. Additionally, 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.

The PSLL is summarized below for the convenience of Contractor. Contractor is advised to review the PSLL and Rules in their entirety. On the 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 Contractor can get more information about how to comply with the PSLL. Contractor acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.

Pursuant to the PSLL and the Rules:

## Applicability, Accrual, and Use

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
${ }^{1}$ 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.
be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than forty hours of sick time to an employee in any Year.

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 forty 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.

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;
- 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;
- closure of such employee's place of business by order of a public official due to a public health emergency; or
- such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency.

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.

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.

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.

## Exemptions and Exceptions

Notwithstanding the above, the PSLL does not apply to any of the following:

- an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;
- an employee covered by a valid collective bargaining agreement in effect on April 1, 2014 until the termination of such agreement;
- an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;
- 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;
- 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;
- an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;
- 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
- a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.


## 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.

## Notice of Rights

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.

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.

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.

## Enforcement and Penalties

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.

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.

## 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.

## NOTICE TO BIDDERS


#### Abstract

Please be advised that the City of New York has issued a new Standard Construction Contract. The new Contract, which is incorporated in this bid, is significantly different from the 2008 version previously used by the City. A listing of some of the significant changes is provided below. This notice is only a partial listing. Please refer to the Contract itself for a full understanding of the changes and the actual text of the changes that were made. The text of the revised Standard Construction Contract is the controlling document should there be any discrepancies between this notice and the Standard Construction Contract.


Significant changes include the following:

## ARTICLE 11 DAMAGES CAUSED BY DELAYS

In 2008, the City embarked on a pilot project to test the use of new construction contract language altering the allocation of the risk of project delays, as between the City and the contractor. The City has determined to make the pilot project language the standard language for all City construction contracts. Accordingly, there is now one Standard City Construction Contract that is to be used by all agencies for all bids released after the release of the new contract. The damages for delay language is Article 11. Please note that changes have been made to the damages for delay provisions from the pilot to the adopted version.

## ARTICLE 22 INSURANCE

Changes have been made to the insurance provisions, including incorporating requirements that the insurance provided comply with recent NYC Department of Buildings regulations specifying required dollar limits for CGL insurance for certain projects and requiring proof of builder's risk insurance prior to Work commencing rather than within 10 days of award.

## ARTICLE 26 <br> EXTRA WORK

The percentage paid for overhead for Extra Work pursuant to Section 26.1.11 is increased from $10 \%$ to $12 \%$ and the calculation of Worker's Compensation insurance costs reimbursed for Extra Work has been clarified.

## ARTICLE 37 LABOR LAW REQUIREMENTS <br> ARTICLE 38 PAYROLL REPORTS

The provisions governing Labor Law provisions have been tightened, including requirements the employee identification cards include a photo (unless the requirement is waived), a prohibition on cash payments to employees and subcontractors, and clear enforcement authority requirements.

## ARTICLE 70 ELECTRONIC FILING

A provision is added to make mandatory the electronic filing of certain alteration permits with the Department of Buildings.

Other significant changes include the following:
ARTICLE 7 INDEMNIFICATION
Changes have been made to the indemnification provisions.

## ARTICLE14 <br> ARTICLE 44 <br> FINAL ACCEPTANCE OF WORK SUBSTANTIAL COMPLETION PAYMENT

The Commissioner is no longer required to issue a substantial completion determination in addition to the already existing requirement that the Engineer issue a substantial completion determination and reach an agreement on a punch list of remaining work. Now, the Engineer, when issuing the punch list to the Contractor, must also include a proposed schedule for the completion of the punch list. The Contractor may propose an alternative schedule that is subject to the approval of the Engineer. If the Contractor fails to respond to the Engineer's proposed schedule, the Engineer's schedule is deemed accepted.

ARTICLE 15 LIQUIDATED DAMAGES
The contract is revised to match Schedule A to provide that liquidated damages are available only until substantial completion.

## ARTICLE 17

The requirements for prior approval of subcontractors, and for contractors to be responsible for the actions of their subcontractors, have been tightened. The requirement that the Contractor list subcontractors in the City's Payee Information Portal has been added; the provision was previously attached as a rider.

## ARTICLE 19 SECURITY DEPOSIT

The provisions governing the return of bid deposits are clarified.

## ARTICLE 20 PAYMENT GUARANTEE

The Payment Guaranty provisions, which apply when the City does not require the Contractor to obtain payment bonds, has been significantly revised to track the requirements of State Finance law 137.

## ARTICLE 28 RECORDKEEPING FOR EXTRA OR DISPUTED WORK

The recordkeeping requirement that currently apply to payments for Time \& Materials for extra work are expressly made applicable to regular work that is paid for on a T \& M basis.

## ARTICLE 35 EMPLOYEES

The whistleblower provisions of local law are added to the construction contract. They previously have been attached as a rider.

## ARTICLE 38 PAYROLL REPORTS

 ARTICLE 77 RECORDS RETENTIONRequirements that records be maintained for six years and directions on how such records must be made available.

## ARTICLE 42 PARTIAL PAYMENTS

Increased flexibility has been provided for when contractors may submit invoices.
ARTICLE 62 TAX EXEMPTION
The provisions identifying the State tax exemption for municipalities are revised to more clearly describe State law.
(NO TEXT ON THIS PAGE)

# CITY OF NEW YORK 

DEPARTMENT OF
DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURES

INFORMATION FOR BIDDERS

JUNE 2015
(NO TEXT ON THIS PAGE)

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

## TABLE OF CONTENTS

SECTION 1. DESCRIPTION AND LOCATION OF WORK ..... 1
SECTION 2. TIME AND PLACE FOR RECEIPT OF BIDS ..... 1
SECTION 3. DEFINITIONS ..... 1
SECTION 4. INVITATION FOR BIDS AND CONTRACT DOCUMENTS ..... 1
SECTION 5. PRE-BID CONFERENCE ..... 2
SECTION 6. AGENCY CONTACT ..... 2
SECTION 7. BIDDER'S OATH ..... 2.
SECTION 8. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED CONDITIONS ..... 2
SECTION 9. EXAMINATION OF PROPOSED CONTRACT ..... 3
SECTION 10. FORM OF BID ..... 3
SECTION 11. IRREVOCABILITY OF BID ..... 3
SECTION 12. ACKNOWLEDGMENT OF AMENDMENTS ..... 4
SECTION 13. BID SAMPLES AND DESCRIPTIVE LITERATURE ..... 4
SECTION 14. PROPRIETARY INFORMATION/TRADE SECRETS ..... 4
SECTION 15. PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS ..... 4
SECTION 16. BID EVALUATION AND AWARD ..... 4
SECTION 17. LATE BIDS, LATE WITHDRAWALS AND LATE MODIFICATIONS ..... 5
SECTION 18. WITHDRAWAL OF BIDS. ..... 5
SECTION 19. MISTAKE IN BIDS ..... 5
SECTION 20. LOW TIE BIDS ..... 6
SECTION 21. REJECTION OF BIDS ..... 6
SECTION 22. RIGHT TO APPEAL DETERMINATIONS OF NON-RESPONSIVENESS OR NON-RESPONSIBILITY AND RIGHT TO PROTEST SOLICITATIONS AND AWARD ..... 7
SECTION 23. AFFIRMATIVE ACTION AND EQUAL
EMPLOYMENT OPPORTUNITY ..... 7
SECTION 24. VENDEX QUESTIONNAIRES ..... 7
SECTION 25. COMPLAINTS ABOUT THE BID PROCESS ..... 8
SECTION 26. BID, PERFORMANCE AND PAYMENT SECURITY ..... 8
SECTION 27. FAILURE TO EXECUTE CONTRACT ..... 9
SECTION 28. BIDDER RESPONSIBILITIES AND QUALIFICATIONS ..... 9
SECTION 29: . EMPLOYMENT REPORT ..... 10
SECTION 30. LABOR LAW REQUIREMENTS ..... 10
SECTION 31. INSURANCE ..... 10
SECTION 32. LUMP SUM CONTRACTS ..... 11
SECTION 33. UNIT PRICE CONTRACTS ..... 11
SECTION 34. EXCISETAX ..... 11
SECTION 35. LICENSES AND PERMITS ..... 11
SECTION 36. MULTIPLE PRIME CONTRACTORS ..... 11
SECTION 37. LOCALLY BASED ENTERPRISE REQUIREMENTS (LBE) ..... 12
SECTION 38. BID SUBMISSION REQUREMENTS ..... 13
SECTION 39. COMPTROLLER'SCERTIFICATE ..... 14
SECTION 40. PROCUREMENT POLICY BOARD RULES ..... 14
SECTION 41. DDC SAFETY REQUIREMENTS ..... 14
(NO TEXT ON THIS PAGE)

## INFORMATION FOR BIDDERS

## 1. Description and Location of Work

The description and location of the work for which bids are requested are specified in Attachment 1, "Bid Information". Attachment 1 is included as page A-1 of the Bid Booklet.

## 2. Time and Place for Receipt of Bids

Sealed bids shall be received on or before the date and hour specified in Attachment 1, at which time they will be publicly opened and read aloud in the presence of the Commissioner or his 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
(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, if used, 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 at the location set forth in Attachment 1.
(C) Deposit for Copy of Invitation For Bids Documents: Prospective bidders may obtain a copy of the Invitation For Bids Documents by complying with the conditions set forth in the Notice of Solicitation. The deposit must be in the form of a check or money order made payable to the City of New York, and drawn upon a state or national bank or trust company, or a check of such bank or trust company signed by a duly authorized officer thereof.
(D) Return of Invitation For Bids Documents: All Invitation For Bids Documents must be returned to the Department upon request. If the bidder elects not to submit a bid thereunder, the

Invitation For Bids Documents shall be returned to the Department, along with a statement that no bid will be submitted.
(E) Return of Deposit: Such deposit will be returned within 30 days after the award of the contract or the rejection of all bids as set forth in the advertisement, provided the Invitation For Bids Documents are returned to the location specified in Attachment 1, in physical condition satisfactory to the Commissioner.
(F) Additional Copies: Additional copies of the Invitation For Bids Documents may be obtained, subject to the conditions set forth in the advertisement for bids.

## 5. Pre-Bid Conference

A pre-bid conference shall be held as set forth in Attachment 1. 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 Attachment 1.

## 7. Bidder's Oath

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

## 8. Examination and Viewing of Site

(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 Attachment 1.
(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 he finds that they do so materially differ, or that they could not have been reasonably anticipated by the contractor and were not anticipated by the City, the Contract may be modified with his 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 pradent 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 BD SHALL BE SIGNED IN INK. ERASURES OR ALTERATIONS SHALL BE INITIALED BY THE SIGNER IN INK. FAILURE TO CONFORM TO THE REQUIREMENTS OF THIS SECTION 10 SHALL RESULT IN THE REJECTION OF THE BID.

## 11. Irrevocability of Bid

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

## 12. Acknowledgment of Amendments

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

## 13. Bid Samples and Descriptive Literature

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

## 14. Proprietary Information/Trade Secrets

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

## 15. Pre-Opening Modification or Withdrawal of Bids

Bids may be modified or withdrawn by written notice received in the office designated in Attachment 1, before the time and date set for the bid opening. If a bid is withdrawn in accordance with this Section, the bid security, if any, shall be returned to the bidder.

## 16. Bid Evaluation and Award

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

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

## 17. Late Bids, Late Withdrawals and Late Modifications

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

## 18. Withdrawal of Bids.

Except as provided for in Section 15, above, a bidder may not withdraw its bid before the expiration of forty-five (45) days after the date of the opening of bids; thereafter, a bidder may withdraw its bid only in writing and in advance of an actual award. If within sixty (60) days after the execution of the Contract, the Commissioner fails to fix the date for commencement of work by written notice to the bidder, the bidder, at his option, may ask to be relieved of his obligation to perform the work called for by written notice to the Commissioner. If such notice is given to the Commissioner, and the request to withdraw is granted, the bidder waives all claims in connection with this Contract.

## 19. Mistake in Bids

(A) Mistake Discovered Before Bid Opening: A bidder may correct mistakes discovered before the time and date set for bid opening by withdrawing or correcting the bid as provided in Section 15 above.
(B) Mistakes Discovered Before Award
(1) In accordance with General Municipal Law (Section 103, subdivision 11), where a unilateral error or mistake is discovered in a bid, such bid may be withdrawn upon written approval of the Agency Chief Contracting Officer if the following conditions are met:
(a) The mistake is known or made known to the agency prior to the awarding of the Contract
(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
(d) The error in the bid is actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of the original work paper, documents, or materials used in the preparation of the bid sought to be withdrawn; and
(e) It is possible to place the agency in the same position as existed prior to the bid.
(2) Unless otherwise required by law, the sole remedy for a bid mistake in accordance with this Article shall be withdrawal of the bid, and the return of the bid bond, or other security, if any, to the bidder. Thereafter, the agency may, in its discretion, award the Contract to the next lowest bidder or rebid the Contract. Any amendment to or reformation of a bid or a Contract to rectify such an error or mistake
therein is strictly prohibited.
(3) If the mistake and the intended correct bid are clearly evident on the face of the bid document, the bid shall be corrected to the intended correct bid and may not be withdrawn. Examples of mistakes that may be corrected are typographical errors, errors in extending unit prices, transposition errors and arithmetical errors.

## 20. Low Tie Bids

(A) When two or more low responsive bids from responsible bidders are identical in price, meeting all the requirements and criteria set forth in the Invitation For Bids, the Agency Chief Contracting Officer will break the tie in the following manner and order of priority:
(1) Award to a certified New York City small, minority or woman-owned business entity bidder;
(2) Award to a New York City bidder;
(3) Award to a certified New York State small, minority or woman-owned business bidder;
(4) Award to a New York State bidder.
(B) If two or more bidders still remain equally eligible after application of paragraph (A) above, award shall be made by a drawing by lot limited to those bidders. The bidders involved shall be invited to attend the drawing. A witness shall be present to verify the drawing and shall certify the results on the bid tabulation sheet.

## 21. Rejection of Bids

(A) Rejection of Individual Bids: The Agency may reject a bid if:
(1) The bidder fails to furnish any of the information required pursuant to Section 24 or 28 hereof; or if
(2) The bidder is determined to be not responsible pursuant to the Procurement Policy Board Rules; or if
(3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board Rules; or if
(4) The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid prices and is thus non-responsive, unless the bidder can show that the prices are not unbalanced for the probable required quantity of items, or if the imbalance is corrected pursuant to Section 15.
(B) Rejection of All Bids: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.
(C) Rejection of All Bids and Negotiation With All Responsible Bidders: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:

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
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.
(D) When the Agency has determined that the Invitation for Bids is to be canceled and that use (D) 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 prit rejected bid price of a responsible bidder that the negotiated price is lower than the lotion for Bids. submitted a bid in response to the Invitation for Bids.

## 22. Right to Appeal Determinations of Non-Responsiveness or Non-Responsibility and Right to <br> 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. VENDEX Questionnaires
(A) Requirement: Pursuant to Administrative Code Section 6-116.2 and the PPB Rules, bidders may be obligated to complete and submit VENDEX Questionnaires. Generally, if this bid is $\$ 100,000$ or more, or if this bid when added to the sum total of all cred from City contractors over the past twelve months, equals or exceeds $\$ 100,000$, Vendex Questid before any award of contract may be made or before Questionnaires must be completed and submiked Non-compliance with these submission requirements may approval is given for a proposed subcontractor. Napal of a subcontractor, subsequent withdrawal of approval for the use of an approved of the bid, or the cancellation of the contract after its award.
(B) Submission: Vendex Questionnaires must be submitted directly to the Mayor's Office of Contract Services, ATTN: Vendex, 253 Broadway, 9th Floor, New York, New York 10007. In addition, the bidder must submit a Confirmation of Vendex Compliance to the agency. A form for this confirmation is set forth in the Bid Booklet.
(C) Obtaining Forms: Vendex Questionnaires, as well as detailed instructions, may be obtained at www.nyc.gov/vendex. The bidder may also obtain Vendex forms and instructions by contacting the

Agency Chief Contracting Office or the contract person for this contract.

## 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 York the Comptroller, Office of Contract Administration, One Centre Street, Room 835, New York, New

## 26. Bid, Performance and Payment Security

(A) Bid Security: Each bid must be accompanied by bid security in an amount and type specified in Attachment 1 (page A-1 of the Bid Booklet). The bid security shall assure the City of New York Performance and Payment Bonds by the bidposal, the execution of the Contract, and the furnishing of to the bidder as follows:
bidders.
deposits of the remaining two unsuccessful Within five (5) days after the execution of the Contract and acceptance of the Contractor's or, if performance the Comptroll we notified to return the bid security of the successful bidder
(3) Article 21 of the Contract equals the amount of the bid security. three (3) lowest bidders at the time of rejection.
(B) Performance and Payment Security: Performance and Payment Security must be provided in an amount and type specified in Attachment 1 (page A-l of the Bid Booklet). The performance and payment security shall be delivered by the contractor prior to or at the time of execution of the shall be enforced, and antracts to deliver the required performance and payment security, its bid security bidder, or the contract may be rebid.
(C) Acceptable Types of Security: payment shall be limited to the following: Acceptable types of security for bids, performance, and
(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 determi
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: (I) 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 202-512-1800; (2) through the Internet at http://www.fms.treas.gov/c570/index.html, and (3) through a computerized public bulletin board, which can be accessed by using your computer modem and dialing 202-874-6887.
(E) Power of Attorney: Attorneys in fact who sign bid, performance, or payment bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

## 27. Failure to Execute Contract

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

## 28. Bidder Responsibilities and Qualifications

(A) Bidders must include with their bids all information necessary for a determination of bidder responsibility, as set forth in the Specifications.
(B) The Agency may require any bidder or prospective bidder to furnish all books of account, records, vouchers, statements or other information concerning the bidder's financial status for examination as may be required by the Agency to ascertain the bidder's responsibility and capability to perform the Contract. If required, a bidder must also submit a sworn statement setting forth such information as the Agency may require concerning present and proposed plant and equipment, the personnel and qualifications of his 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 his 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

## 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 Bid Booklet.

## 30. Labor Law Requirements

(A) General: The successful bidder will be required to comply strictly with all Federal,
(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 and failure to comply will ber is reminded that all wage provisions of this Contract will be enforced strictly contractor being debarred by the City from future conting performance. Noncompliance may result in the result in decisions which may debar a contractor from bidracts. Complaints filed with the Comptroller may and other political subdivisions.
(C) Records:
required documents and verify attendance and Contractor is expected to submit accurate payroll reports and other 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 Conditions. Such required insurance must be and in the amounts set forth in Schedule A of the General work and up to the date of final acceptance of all required work. date the contractor is ordered to commence
(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 State Workers' Corkers' compensation and disability benefits, as required by Section 57 of the New York State Workers' Compensation Law and Section 220 of the Disability Benefits Law.

## 32. Lump Sum Contracts

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

## 33. Unit Price Contracts

(A) Comparison of Bids: Bids on Unit Price Contracts will be compared on the basis of a total estimated price, arrived at by taking the sum of the estimated quantities of such items, in accordance with the Engineer's Estimate of Quantities set forth in the Bid Schedule, multiplied by the corresponding unit prices, and including any lump sum bids on individual items.
(B) Variations from Engineer's Estimate: Bidders are warned that the Engineer's Estimate of Quantities on the various items of work and materials is approximate only, given solely to be used as a uniform basis for the comparison of bids, and is not be considered part of this contract. The quantities actually required to complete the contract work may be less or more than so estimated, and if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.
(C) Overruns: The terms and conditions applicable to overruns of unit price items are set forth in Article 26 of the Contract.

## 34. Excise Tax

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

## 35. Licenses and Permits

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

## 36. Multiple Prime Contractors

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

## 37. Locally Based Enterprise Requirements (LBE)

This Contract is subject to the requirements of Administrative Code, Section 6-108.1, and the regulations promulgated thereunder. No construction contract will be awarded unless and until these requirements have been complied with in their entirety. The bidder is advised of the provisions set forth below, as well as the provisions with respect to the Locally Based Enterprise Program contained in Article 67 of the Contract. The contractor is advised that:
(A) If any portion of the Contract is subcontracted, not less than ten percent of the total dollar amount of the contract shall be awarded to locally based enterprises ("LBEs"); except, where less than ten percent of the total dollar amount of the Contract is subcontracted, such lesser percentage shall be so awarded.
(B) No contractor shall require performance and payment bonds from LBE subcontractors.
(C) No Contract shall be awarded unless the contractor first identifies in its bid:
(1) the percentage, dollar amount and type of work to be subcontracted; and
(2) the percentage, dollar amount and type of work to be subcontracted to LBEs.
(D) Within ten calendar days after notification of low bid, the apparent low bidder shall submit an "LBE Participation Schedule" to the contracting agency. If such schedule does not identify sufficient LBE subcontractors to meet the requirements of Administrative Code Section 6-108.1, the apparent low bidder shall submit documentation of its good faith efforts to meet such requirements.
(1) The "LBE Participation Schedule" shall include:
(a) the name and address of each LBE that will be given a subcontract,
(b) the percentage, dollar amount and type of work to be subcontracted to the LBE,
(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. Bid Submission Requirements

The following forms, all of which are contained in the Bid Booklet, are to be completed and submitted with the bid:
(1) Bid Schedule and Bid Form, including Affirmation
(2) Bid Security (if required, see Attachment 1 on Page A-1)
(3) M/WBE Subcontactor Utilization Plan (if participation goals have been established)

FAILURE TO SUBMIT ITEMS (1), (2) AND (3) WILL RESULT IN THE DISQUALIFICATION OF THE BID.
(4) Safety Questionnaire
(5) Construction Employment Report (if bid is $\$ 1,000,000$ or more)
(6) Contract Certificate (if bid is less than $\$ 1,000,000$ )
(7) Confirmation of Vendex Compliance
(8) Special Experience Requirements (if applicable to this contract)
(9) Apprenticeship Program Questionnaire (if applicable)

> FAILURE TO SUBMIT ITEMS (4) THROUGH (9)
> MAY RESULT IN THE DISOUALIFICATION OF THE BD.

## 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

June 2015

THE DDC SAFETY REQUIREMENTS INCLUDE THE FOLLOWING SECTIONS:
I. POLICY ON SITE SAFETY
II. PURPOSE
III. DEFINITIONS
IV. RESPONSIBILITIES
V. SAFETY QUESTIONNAIRE
VI. SAFETY PROGRAM AND SITE SAFETY PLAN
VII. KICK-OFF/PRE-CONSTRUCTION MEETINGS AND SAFETY REVIEW
VIII. EVALUATION DURING WORK IN PROGRESS
IX. SAFETY PERFORMANCE EVALUATION

# City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety 

## 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 jobsites must, at a minimum, comply with applicable federal, state and city laws, rules and regulations, including without limitation:

- U. S. Department of Labor 29 Code of Federal Regulations (CFR) Part 1926 and applicable Sub-parts of Part 1910 - U.S. Occupational Safety and Health Administration (OSHA); New York State Department of Labor Industrial Code Rule 23 - Protection in Construction, Demolition and Excavation;
- New York City Construction Codes, Title 28
a NYC Department of Transportation Title 34 Chapter 2 - Highway Rules
- New York State Department of Labor Industrial Code Rule 16 NYCRR Part 753

T Title 15 of the Rules of the City of New York, Chapter 13 Citywide Construction Dust Mitigation

- Manual on Uniform Traffic Control Devices (MUTCD)
- Title 15 of the Rules of the City of New York, Chapter 28 Citywide Construction Noise Mitigation


## 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 shall mean the person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the 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.

Construction Safety Auditor: A representative of the QA\&CS Construction Safety Unit 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 surveys, reviewing health and safety plans, reviewing construction permits, and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.

Construction Safety Unit: A part of QA\&CS within the Division of Program Management/ Safety \& Site Support that assesses contractor safety on DDC jobsites and advises responsible parties of needed corrective actions.

City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety

Construction Superintendent: A representative of the contractor responsible for overseeing performance of the required construction work. This individual must engage in sound construction practices, and is responsible to maintain a safe work site. In the case of a project involving the demolition, alteration or new construction of buildings, the Construction Superintendent must be licensed by the NYC Department of Buildings.

Contractor: For purposes of these Safety Requirements, the term "Contractor" shall mean any person or entity that enters into a contract for the performance of construction work on a DDC project. The term "Contractor" shall 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 meetings, giving to all jobsite personnel by contractor, with the purpose of discussing project specific safety procedures for the scheduled construction work.

Director - Quality Assurance and Construction Safety (QA\&CS): Responsible for the operations of the QACS Construction Safety Unit and the DDC Site Safety management programs.

Job Hazard Analysis (JHA): A process of identifying the major job steps and any potential site-specific hazards that may be present during construction and establishing the means and methods to eliminate or control those hazards.

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 and trenching and shoring, 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 shall have completed an authorized 30 hour OSHA Construction Safety Course and other safety training applicable to Contractor's/subcontractor's project work. Except in instances where a dedicated Project Safety Manager is required, a Project Safety Representative may also function as a superintendent, foreman or crew leader on the Project, but must have sufficient experience and authority to undertake corrective actions and must qualify to be a competent person. No work is to be performed on site when a Project Safety Representative is not present.

Project Safety Manager: A dedicated, full-time project safety manager may be a contractual requirement on large projects or projects deemed by DDC to be particularly high risk. This would be in addition or in lieu of a Contractor's Project Safety Representative. This individual shall not have any other assigned duties. This individual shall have received, at a minimum an authorized 30 hour OSHA Construction Safety Course. Other examples of acceptable training are OSHA Safety and Health Standards for the Construction Industry training program (OSHA 510), Certified Safety Professional (CSP), Certified Industrial Hygienist (CIH) or a degree/certificate in a safety and health from a college-level curriculum.
A Project Safety Manager shall possess the additional training, years of experience, and skills necessary to thoroughly understand the health and safety hazards and controls for large construction projects, including the full scope of the specific Work.

QA\&CS - Quality Assurance and Construction Safety of the New York City Department of Design and Construction.

City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety
Resident Engineer (RE) / Construction Project Manager (CPM): Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. (The RE/CPM may be a third-party consultant, including a Construction Management firm, retained by DDC)

Safety Program: Established by the Contractor that covers all operations of that Contractor and establishes the Contractor's overall safety policy, regulatory compliance plan and minimum safety standards. The Safety Program must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

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 NYC Construction Codes - Title 28, the Contractor shall provide a Site Safety Manager with a Site Safety Manager License issued by the NYC Department of Building.

Site Safety Plan: A site-specific safety plan developed by the Contractor for a specific project. The Site Safety Plan must identify hazards associated with the project, and include specific safety procedures and training appropriate and necessary to complete the work. The Site Safety Plan must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

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 documented 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.

Work: The construction required by the 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.

## IV. RESPONSIBILITIES

All persons who manage, perform, and provide support for construction projects shall 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. DDC or CM Resident Engineer / Construction Project Manager

- Monitors the issuance of safety- related permits, approvals and drawings and maintains copies on site.
- Monitors construction-related work activities to confirm that they are conducted in accordance with DDC policies and all applicable regulations that pertain to construction safety.
- Maintains documentation and periodically attends weekly safety meetings and daily safety job briefings.
- Notifies the Construction Safety Unit and the ACCO's Insurance and Risk Management Unit of project- related accidents and emergencies, as per DDC's Construction Safety Emergency and Accident Notification and Response Protocol.
- Gathers facts related to all accidents and prepares DDC Construction Accident Report.


## City of New York Department of Design and Construction: Safety Requirements <br> Safety and Site Support- Quality Assurance and Construction Safety

- Notifies the Construction Safety Unit within two (2) hours of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB or others and forwards a copy of the inspection report within three days of its receipt.
- Monitors the conditions at the site for conformance with the contractor's Site Safety Plan and DDC construction documents.
- Notifies the contractor and DDC in the event that any condition or activity exists that 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.
- Notifies DDC of any unsafe or unhealthy condition and directs the contractor to provide such labor, materials, equipment and supervision to abate such conditions.
- Escort and assist QA\&CS Construction Safety Auditors during the field and record inspections.
- Reports emergency conditions to the Construction Safety Unit immediately.


## B. Contractors

- Submit a completed Safety Questionnaire and other safety performance related documentation with its bid or as part of a pre-qualification package.
- Complete a written Job Hazard Analysis (JHA) that identifies safety hazards for project specific work tasks and hazard control methods. A written JHA shall be available at the site for reference and included in the Site Safety Plan submitted by the contractor.
- Submit a Site Safety Plan and Safety Program within 30 days from the Award Date or as otherwise directed. The Site Safety Plan and Safety Program are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. The Site Safety Plan shall be revised and updated as necessary.
- Develop project specific safety procedures to protect general public during all construction activities for the duration of the project.
- 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 weekly safety meetings and daily job briefing sessions for the duration of the project. Documentation to be provided to the RE/CPM on a monthly basis.
- Name the Project Safety Representative and Project Safety Manager, if required. The Contractor will be required to identify the Project Safety Representative and Project Safety Manager in the Site Safety Plan. Resumes, outlining the qualification and experience for the Project Safety Representative and Project Safety Manager, shall be available upon request. DDC reserves the right to request that the Contractor replace any Project Safety Representative or Project Safety Manager for any reason at any time during the project.
- Name a Competent Person(s), The Contractor will be required to identify a Competent Person(s) in the Site Safety Plan.
- Comply with all mandated federal, state and local safety and health rules and regulations.
- Comply with all provisions of the Site Safety Plan.
- Conduct applicable safety training prior to the commencement of work at the site. All training records (OSHA 10-hour, flagger, scaffold, fall protection, confined space entry, etc.) shall be provided to the RE/CPM prior to mobilization, included in the Site Safety Plan, kept current during the course of the project, and available for review. Prior to performing any work on DDC project all employees shall have successfully completed, within the previous five calendar years, a 10 Hour OSHA construction safety course.
- As part of the Site Safety Plan, prepare a site specific programs and plans, such as MPT plan, steel erection plan, confined space program, fall protection plan, demolition plan, etc. (if not otherwise provided in the contract documents) and comply with all of its provisions.
- Conduct and document site-specific safety orientation for Contractor personnel to review the hazards associated with the project as identified in the Site Safety Plan and the specific safety procedures and


## City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety

controls that will be used to protect workers, the general public and property. The Project Safety Representative and/or Project Safety Manager will conduct this training prior to mobilization and provide documentation to the RE/CPM.

- 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.).
- Report unsafe or unhealthy conditions to the RE/CPM as soon as practical, but no more than 24 hours after discovery, and take prompt actions to remove or abate such conditions.
- Report any accidents involving injuries to workers or the general public, as well as property damage, to the RE/CPM within one (1) hour.
- Following an accident, the Contractor shall not remove or alter any equipment, structure, material, or evidence related to the accident. 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.
- Notify the RE/CPM within one (1) hour of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB or others.
- Maintain all records pertaining to all required compliance documents and accident and injury reports.
- Address DDC recommendations on safety, which shall 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 must 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 must provide the requested information within 15
days. 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
Criteria 2: Ine most current Bureau of Labor Statistics data for the Contractors SIC code); and
Insurance workers compensation Experience Modification Rate (EMR) equal to or less

Criteria 3:
Criteria 4:
Criteria 5:
safety plan submittals; etc.
OSHA violation history for the last three (3) years;
Contractor shall provide OSHA Injury and Illness Records (currently OSHA 300 and $300 \mathrm{~A} \operatorname{Logs}$ ) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Construction Safety Unit 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.

## City of New York Department of Design and Construction: Safety Requirements Safety and Site Support-Quality Assurance and Construction Safety

## VI. SAFETY PROGRAM AND SITE SAFETY PLAN

Within thirty (30) days from the Award Date, or as otherwise directed, the Contractor shall submit the following: (1) Safety Program, and (2) Site Safety Plan. The Safety Program shall set forth the Contractor's overall safety policy, regulatory compliance plan and minimum safety standards. The Site Safety Plan shall identify project work scope, safety hazards associated with the project tasks, and include specific safety procedures and training appropriate and necessary to by the Construction Safety Unit Program and the Site Safety Plan are subject to review and accep Contractor to submit an acceptable Site prior to the commencement of work at the site. Failure by
Safety Plan and Safety Program shall be grounds for default.
Safety Program: Corporate Safety Program established by the Contractor that includes the Contractor's construction operations, performed by the Contractor. The Safety Program shall be a written document with a separate section describing each element of the Safety Program. The Safety Program shall have at minimum the following elements applicable to the Contractor's operations:

- Responsibility and Organization - Contractor's company organization chart, including titles, names, contact information, roles and responsibilities for key personnel, etc.
- Safety Training Program - Contractor's corporate training program.
- Hazard Corrective Actions - Criteria for safety inspections, identification of safety noncompliances, implementation and verification of corrective actions, forms to document safety inspections results, etc.
- Accident/Exposure Investigation - Responsible staff; reporting and recording criteria; OSHA
- Recordkeeping and Reporting Injuri

300 and 300A form completion, etc.

- Fire Protection and Prevention Program
- Housekeeping
- Illumination
- Sanitation
- Personal Protective Equipment (PPE) - Company policy for the use of head protection, foot protection, hearing protection, eye and face protection, protective clothing, and any additional protective equipment based on work tasks; PPE inspection and replacement policy.
- Hazard Communication Program
- Employee Emergency Action Plan
- Protection of Underground Facilities and Utilities
- Ionizing/Nonionizing Radiation
- Material Handling, Storage, Use and Disposal
- Tools - Hand and Power
- Signs, Signals, and Barricades
- Scaffold - Local Law 52 req general safety requirements.
- Welding and Cutting
- Electrical Safety
- Fall Protection
- Cranes, Derrick, Hoists, Elevators, Conveyors
- Excavation Safety
- Concrete and Masonry Construction
- Maintenance and Protection of Traffic
- Steel Erection
- Demolition
- Blasting and the Use of Explosives
- Stairways and Ladders


# City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety 

 Toxic and Hazardous Substances- Alcohol and Drug Abuse Policy
- Rodents and Vermin
- Occupational Noise Exposure

Confined Space Program - General confined Space Program: training requirements, confined space hazard evaluation procedure, atmospheric testing procedure, confined space classification, permit-required procedure, communication procedure, rescue procedure, forms, etc.
Construction Vehicles/Heavy Equipment

- Dust Control Procedures

Site Safety Plan: The Site Safety Plan shall be a written document and shall apply to all project specific Contractor and subcontractor operations, and shall have at a minimum, the following elements with each or high-risk projects, such as tunnels or high-rise necessary to modify the basic format for certain unique - Proiect Wh-rise construction):

Project Work Scope - Detailed information regarding work tasks that will be performed by
contractor and subcontractors under the project.

- Responsibility and Organization Che project
project, including titles, names, contact inftor's organization chart with responsible staff for the
- Safety Training and Education - OSHA 10 mation, roles and responsibilities. and weekly safety meetings, any work task spurs training, requirements for daily safety briefings of training program for the project.
- Job Hazard Analysis identified hazards, hazard control methods specific Job Hazard Analysis including work tasks, project id, location, name and signature of a certifyistrative, engineering, PPE), contractor's name,
of a certifying person, hazard assessment date.
- H
implementation of corrective actions.
- Accident/Exposure Investigation

Project specific procedures for accident investigatent notification procedure of DDC project staff.

- First Aid and Medical Attention - Responsible staff implementation of corrective actions.
directions to local hospitals; emergency telephone numbers.
- Project Specific Fire Protection and Prevention Prograbrs.
- Project Specific Illumination Procedure.
- Project Specific Sanitation Procedure.
- Personal Protective Equipment (PPE)
- Hazard Communication Program - Responsible staff, training; SD chemical; location of the program and SDS records.
- Means of Egress - Information regarding free and building or structure; exit marking.
- Employee Emergency Action Plan maintenance of means of egress, etc. evacuation procedure, procedure to account for specific: responsible staff, emergency alarm system,
- Evacuation Plan - Project specific evacuation employees after evacuation, etc. routes.
- Protection of Underground Facilities and Utilities, including responsible staff.
- Ionizing/Nonionizing Radiation - Competent persponsible staff.
of radiation, employees exposure and protection, etc.
- Material Handling, Storage storage and disposal.
specific information regarding material signs, pedestrian fencing and barricades, etc.
- Scaffold - Project specific scaffold types,
for project specific scaffold, falling object protection.


## City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety

- 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, FDNY certificate requirements.
- Fall Protection - Project specific information regarding selected fall protection systems, fall protection plan.
- 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.
- Excavation Safety - Competent person, project specific protective system.
- Maintenance and Protection of Traffic Plan - Project specific MPT plan, flagmen training.
- Steel Erection - Site specific erection plan, requirements for applicable written notifications, competent person.
- 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.
- Blasting and the Use of Explosives - Project specific safety procedures, warning signs, training/qualification, transportation, storage and use of explosives, inspection.
- Toxic and Hazardous Substances - Safety procedures for substances to be used on project.
- Noise Mitigation Plan - Completed project specific Noise Mitigation Plan.
- Confined Space Program - Project specific Confined Space Program, responsible staff, training records, equipment information, rescue procedure, list of project specific confined spaces, forms.
- Construction Vehicles/Heavy Equipment - Type of construction vehicles/heavy equipment to be used on site.
- Dust Mitigation Plan - Completed project specific Dust Mitigation Plan.

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 must conduct a site and task assessment JHA to identify the major job steps 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 shall be communicated to all contractor/subcontractor personnel on site.
The initial Job Hazard Assessment form shall be included in the contractor's Site Safety Plan and the current form shall be available at the construction site for reference.

Certain DDC programs, such as Job Order Contracting System (JOCS), may not necessarily require Site Safety Plans. The JOCS contractor shall submit a Safety Program. The Site Safety Plan requirement for the JOCS contractor will be determined by QA\&CS based on a project work scope, construction activities and project location. In addition, certain DDC Operating Units may establish client-specific program or safety requirements. The contractor's Site Safety Plan must address such client-specific program or safety requirements.

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

RE/CPM shall invite QA\&CS Construction Safety Unit to the construction kick-off meeting. A QA\&CS representative will participate in this meeting with the Contractor and RE/CPM prior to the start of the project for the purpose of:
A. Reviewing the safety issues detailed in the contract.
B. Reviewing the Site Safety Plan.
C. Reviewing any new issues or information that was not previously addressed.
D. Discussing planned inspections and audits of the site by QA\&CS personnel.

# City of New York Department of Design and Construction: Safety Requirements Safety and Site Support- Quality Assurance and Construction Safety 

## VIII. EVALUATION DURING WORK IN PROGRESS

The Contractor's adherence to these Safety Requirements will be monitored throughout the project. This will be accomplished by the following:
A. Use of a safety checklist by a representative of the Construction Safety Unit or other designated DDC representative or Consultant during regular, unannounced inspections of the job site. Field Exit Conferences will be held with the RE/CPM, Contractor Project Safety Representatives.
B. The RE/CPM will continually monitor the safety and environmental performance of the contractor's employees and work methods. Deficiencies shall be brought to the attention of the contractor's representative on site for immediate correction. The DDC representative will maintain a written record of these deficiencies and have these records available upon request. Any critical deficiencies shall be immediately reported to QA\&CS phone\# (718) 391-1624 or (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 - QA\&CS, or his/her designee will meet with the Contractor's Project Safety Representative and or Project Safety Manager, the DDC Project Manager, the RE/CPM, 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 to occur with inadequate attention by the contractor, this shall, among other remedies available, be grounds for default.
E. The contractor shall within 1 hour inform the RE/CPM/CM of all accidents/incidents including all fatalities, any injuries to employees or members of the general public, and property damage (e.g., structural damage, equipment rollovers, utility damage, loads dropped from crane). The RE/CPM shall notify the Construction Safety Unit as per DDC's Construction Safety Emergency and Accident Notification and Response Protocol and shall maintain a record of all contractor accidents/incidents for the project.
F. The Construction Safety Unit shall be notified 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 shall be a reason to rate a Contractor unsatisfactory which may be reflected in the City's Vendex system and will be considered for future procurement actions as set forth in the City's Procurement Policy Board Rules.

# CITY OF NEW YORK STANDARD CONSTRUCTION CONTRACT 

DECEMBER 2013
(NO TEXT ON THIS PAGE)

CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT
TABLE OF CONTENTS

## CHAPTERI

## THE CONTRACT AND DEFINITIONS

ARTICLE 1. THE CONTRACT
ARTICLE 2. DEFINITIONS

CHAPTER II
THE WORK AND ITS PERFORMANCE
ARTICLE 3. CHARACTER OF THE WORK
MEANS AND METHODS OF CONSTRUCTION ..... 44
5
COMPLIANCE WITH LAWS ..... 10INSPECTION$\begin{array}{ll}\text { ARTICLE 6. } & \text { PROECRTION OF WORK AND OF PERSONS AND } \\ \text { ARTICLE 7. }\end{array}$
PROPERTY; NOTICES AND INDEMNIFICATION ..... 11
CHAPTER III
TIME PROVISIONS
ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK ..... 12
ARTICLE 9. PROGRESS SCHEDULES ..... 13ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVALARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY ANDARTICLE 11. DOCUMENTATION OF DAMAGES CAUSED BY DELAY13
ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS ..... 17
ARTICLE 13. EXTENSION OF TIME FOR PEREORTANCE OF THE WORK ..... 21
ARTICLE 14. COMPLETION AND ..... 22
ARTICLE 15. OCCUPATION OR USE PRIOR TO COMPLETION ..... 22
CHAPTER IV
SUBCONTRACTS AND ASSIGNMENTS
ARTICLE 17. SUBCONTRACTS
ARTICLE 18. ASSIGNMENTS ..... 2523

CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT
TABLE OF CONTENTS
CHAPTER V
CONTRACTOR'S SECURITY AND GUARANTY
ARTICLE 19. SECURITY DEPOSIT
ARTICLE 20. PAYMENT GUARANTEE ..... 26
ARTICLE 21. RETAINED PERCENTAGE ..... 26
ARTICLE 22. INSURANCE ..... 29
ARTICLE 23. MONEY RETAINED AGAINST CLAIMS ..... 29
ARTICLE 24. MAINTENANCE AND GUARANTY ..... 3536
CHAPTER VI
CHANGES, EXTRA WORK AND DOCUMENTATION OF CLAIM
ARTICLE 25. CHANGES
ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND ..... 37
EXTRA WORK
ARTICLE 27. RESOLUTION OF DISPUTES ..... 37
ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR ..... 40
ARTICLE 29. OMITTED WORK ..... 44
ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND
DAMAGES; PRODUCTION OF FINANCIAL RECORDS ..... 45 ..... 45
CHAPTER VII
POWERS OF THE RESIDENT ENGINEER, THE ENGINEER
OR ARCHITECT AND THE COMMISSIONER
ARTICLE 31. THE RESIDENT ENGINEER ..... 46
ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER ARTICLE 33. THE COMMISSIONER ..... 47
ARTICLE 34. NO ESTOPPEL ..... 4748
CHAPTER VIII
LABOR PROVISIONS
ARTICLE 35. EMPLOYEES
ARTICLE 36. NO DISCRIMINATION ..... 48
ARTICLE 37. LABOR LAW REQUIREMENTS ..... 50
ARTICLE 38. PAYROLL REPORTS ..... 52
ARTICLE 39. DUST HAZARDS ..... 5758

## CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT
TABLE OF CONTENTS

## CHAPTER IX

PARTIAL AND FINAL PAYMENTS

|  |  | 58 |
| :--- | :--- | :--- |
| ARTICLE 40. | CONTRACT PRICE | 58 |
| ARTICLE 41. | BID BREAKDOWN ON LUMP SUM | 58 |
| ARTICLE 42. | PARTIAL PAYMENTS | 59 |
| ARTICLE 43. | PROMPT PAYMENT | 59 |
| ARTICLE 44. | SUBSTANTIAL COMPLETION PAYMENT | 60 |
| ARTICLE 45. | FINAL PAYMENT | 61 |
| ARTICLE 46. | ACCEPTANCE OF FINAL PAYMENT | 62 |
| ARTICLE 47. | APPROVAL BY PUBLIC DESIGN COMMISSION |  |

## CHAPTER X

 CONTRACTOR'S DEFAULTARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT

62
64
ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT 64
ARTICLE 50. QUITTING THE SITE64

ARTICLE 51. COMPLETION OF THE WORK 64
ARTICLE 52. PARTIAL DEFAULT 64

ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK 65 ARTICLE 54. OTHER REMEDIES

## CHAPTER XI

MISCELLANEOUS PROVISIONS

## ARTICLE 55. CONTRACTOR'S WARRANTIES <br> 66 <br> ARTICLE 56. CLAIMS AND ACTIONS THEREON <br> ..... 66

ARTICLE 57. INFRINGEMENT ..... 66
ARTICLE 58. NO CLAIM AGAINST OFFICERS, AGENTS OR ..... 67
EMPLOYEES ..... 67
60. UNLAWFUL PROVISIONS DEEMED STRICKEN ..... 67
FROM CONTRACT ..... 67
ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED ..... 67
ARTICLE 62. TAX EXEMPTION ..... 69
ARTICLE 63. INVESTIGATION(S) CLAUSE ..... 71ARTICLE 64. TERMINATION BY THE CENT TO JURISDICTIONARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION73

## CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT
TABLE OF CONTENTS
CHAPTER XI (CONT'D)
MISCELLANEOUS PROVISIONS
ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT .....
74 .....
74
ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM
ARTICLE 68.
ANTITRUST ..... 74
ARTICLE 69. MACBRIDE PRINCIPLES PROVISIONS ..... 75
ARTICLE 70 ELECTRONIC FILING/NYC DEVELOP ..... 75
ARTICLE 71. PROHIBITION OF TROPIC DEVELOPMENT HUB ..... 77
ARTICLE 72. CONFLICTS OF INTEREST ..... 77
ARTICLE 73. MERGER CLAUSE ..... 78
ARTICLE 74. STATEMENT OF WORK ..... 78
ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR ..... 78 ..... 78
ARTICLE 76: ELECTRONIC FUNDS TRANSFER
ARTICLE 76: ELECTRONIC FUNDS TRANSFER ..... 78
ARTICLE 77: RECORDS RETENTION
ARTICLE 77: RECORDS RETENTION
ARTICLE 78: $\quad$ PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED ..... 79
BUSINESS ENTERPRISES IN CITY PROCUREMENT ..... 79
SIGNATURES
ACKNOWLEDGMENT BY CORPORATION ..... 87
ACKNOWLEDGMENT BY PARTNERSHIP ..... 88
ACKNOWLEDGMENT BY INDIVIDUAL ..... 88
ACKNOWLEDGMENT BY COMMISSIONER ..... 88
AUTHORITY ..... 89
COMPTROLLER'S CERTIFICATE ..... 90
MAYOR'S CERTIFICATE ..... 90
PERFORMANCE BOND \#1 ..... 91
PERFORMANCE BOND \#2 ..... 92
PAYMENT BOND ..... 96

## WITNESSETH:

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

## CHAPTER I <br> 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 may be 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)

2.1.18 "Final Acceptance" shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.
2.1.19 "Final Approved Punch List" shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.
2.1.20 "Law" or "Laws" shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.
2.1.21 "Materialman" shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.
2.1.22 "Means and Methods of Construction" shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.
2.1.23"Notice to Proceed" or "Order to Work" shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.
2.1.24 "Other Contractor(s)" shall mean any contractor (other than the entity which executed this Contract or its Subcontractors) who or which has a contract with the City for work on or adjacent to the building or Site of the Work.
2.1.25 "Payroll Taxes" shall mean State Unemployment Insurance (SUI), Federal Unemployment Insurance (FUI), and payments pursuant to the Federal Insurance Contributions Act (FICA).
2.1.26 "Project" shall mean the public improvement to which this Contract relates.
2.1.27 "Procurement Policy Board" (PPB) shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.
2.1.28 "Required Quantity" in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.
2.1.29 "Resident Engineer" shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.
2.1.30 "Site" shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.
2.1.31 "Small Tools" shall mean items that are ordinarily required for a worker's job function, including but not limited to, equipment that ordinarily has no licensing, insurance
or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.
2.1.32 "Specifications" shall mean all of the directions, requirements, and standards of performance applying to the Work as hereinafter detailed and designated under the Specifications.
2.1.33 "Subcontractor" shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.
2.1.34 "Substantial Completion" shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the Final Approved Punch List.
2.1.35 "Work" shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

## CHAPTER II THE WORK AND ITS PERFORMANCE

## ARTICLE 3. CHARACTER OF THE WORK

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

## ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION

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

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

4.1.2 Will not produce finished Work in accordance with the terms of the Contract; or
4.1.3 Will be detrimental to the overall progress of the Project.
4.2 The Engineer's approval of the Contractor's Means and Methods of Construction, or his/her failure to exercise his/her right to reject such means or methods, shall not relieve the Contractor of its obligation to complete the Work as provided in this Contract; nor shall the exercise of such right to reject create a cause of action for damages.

## ARTICLE 5. COMPLIANCE WITH LAWS

5.1 The Contractor shall comply with all Laws applicable to this Contract and to the Work to be done hereunder.
5.2 Procurement Policy Board Rules: This Contract is subject to the Rules of the PPB ("PPB Rules") in effect at the time of the bid opening for this Contract. In the event of a conflict between the PPB Rules and a provision of this Contract, the PPB Rules shall take precedence.
5.3 Noise Control Code provisions.
5.3.1 In accordance with the provisions of Section 24-216(b) of the Administrative Code of the City ("Administrative Code"), Noise Abatement Contract Compliance, devices and activities which will be operated, conducted, constructed or manufactured pursuant to this Contract and which are subject to the provisions of the City Noise Control Code shall be operated, conducted, constructed, or manufactured without causing a violation of the Administrative Code. Such devices and activities shall incorporate advances in the art of noise control development for the kind and level of noise emitted or produced by such devices and activities, in accordance with regulations issued by the Commissioner of the City Department of Environmental Protection.
5.3.2 The Contractor agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York ("RCNY") Section 28100 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 dieselpowered 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 $5.4 .5(\mathrm{c})$ 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 $5.4 .2(\mathrm{c})$, 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). Lower Manhattan, as amended:
5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:
5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.
5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the City known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.
5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.
5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except
that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.
5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million ( 15 ppm ).
5.5.2 Requirements. Contractors and Subcontractors are required to use only Ultra Low practicable, to reduce the used on a Lower Manhattan Redevelopment Project and, where oxidation catalysts, particulate filters, or techs by retrofitting such Nonroad Vehicles with 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 of the RCNY, pursuant to Chapter 3 of Title 6 ef Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

## ARTICLE 6. INSPECTION

6.1 During the progress of the Work and up to the date of Final Acceptance, the Contractor shall at all times afford the representatives of the City every reasonable, safe, and proper facility for inspecting all Work done or being done at the Site and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.
6.2 The Contractor's obligation hereunder shall include the uncovering or taking down of finished Work and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if Work thus exposed proves satisfactory, and if the Contractor has complied with Article 6.1, such uncovering or taking down and restoration shall be considered an item of Extra Work to be paid for in accordance with the provisions of Article 26. If the Work thus exposed proves unsatisfactory, the City has no obligation to compensate the Contractor for the uncovering, taking down or restoration.
6.3 Inspection and approval by the Commissioner, the Engineer, Project Manager, or Resident Engineer, of finished Work or of Work being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the Contractor of its obligation to perform the Work in strict accordance with the Contract. Finished or unfinished Work not found to be in strict accordance with the Contract shall be replaced as directed by the Engineer, even though such Work may have been previously approved and paid for. Such corrective Work is Contract Work and shall not be deemed Extra Work.
6.4 Rejected Work and materials shall be promptly taken down and removed from the Site, which must at all times be kept in a reasonably clean and neat condition.

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

7.1 During the performance of the Work and up to the date of Final Acceptance, the Contractor shall be under an absolute obligation to protect the finished and unfinished Work against any damage, loss, injury, theft and/or vandalism and in the event of such damage, loss, injury, theft and/or vandalism, it shall promptly replace and/or repair such Work at the Contractor's sole cost and expense, as directed by the Resident Engineer. The obligation to deliver finished Work in strict accordance with the Contract prior to Final Acceptance shall be absolute and shall not be affected by the Resident Engineer's approval of, or failure to prohibit, the Means and Methods of Construction used by the Contractor.
7.2 During the performance of the Work and up to the date of Final Acceptance, the Contractor shall take all reasonable precautions to protect all persons and the property of the City and of others from damage, loss or injury resulting from the Contractor's, and/or its Subcontractors' operations under this Contract. The Contractor's obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the Site suitable and sufficient protection such as lights, barricades, and enclosures.
7.3 The Contractor shall comply with the notification requirements set forth below in the event of any loss, damage or injury to Work, persons or property, or any accidents arising out of the operations of the Contractor and/or its Subcontractors under this Contract.
7.3.1 The Contractor shall make a full and complete report in writing to the Resident Engineer within three (3) Days after the occurrence.
7.3.2 The Contractor shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the Contractor's own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the City and/or the Engineer, Architect, or Project Manager are Additional Insureds, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured."
7.3.2(a) Whenever such notice is sent under a policy on which the City is an Additional Insured, the Contractor shall provide copies of the notice to the Comptroller, the Commissioner and the City Corporation Counsel. The copy to the Comptroller shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street - Room 1222, New York, New York, 10007. The copy to the Commissioner shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the City Corporation Counsel shall be sent to Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.
7.3.2(b) If the Contractor fails to provide any of the foregoing notices to any appropriate insurance carrier(s) in a timely and complete manner, the Contractor shall indemnify the City for all losses, judgments, settlements, and expenses, including reasonable attorneys' fees, arising from an insurer's disclaimer of coverage citing late notice by or on behalf of the City.
7.4 To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold the City, its employees, and officials (the "Indemnitees") harmless against any and all claims (including but not limited to claims asserted by any employee of the Contractor and/or its Subcontractors) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys' fees and disbursements) allegedly arising out of or in any way related to the operations of the Contractor and/or its Subcontractors in the performance of this Contract or from the Contractor's and/or its Subcontractors' failure to comply with any of the provisions of this Contract or of the Law. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of Law or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing or contributing to the underlying claim (in which case, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault whether by statute, by operation of Law, or otherwise). Where partial indemnity is provided hereunder, all costs and expenses shall be indemnified on a pro rata basis.
7.4.1 Indemnification under Article 7.4 or any other provision of the Contract shall operate whether or not Contractor or its Subcontractors have placed and maintained the insurance specified under Article 22.
7.5 The provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the Contractor or the City.

## CHAPTER III <br> TIME PROVISIONS

## ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK

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

## ARTICLE 9. PROGRESS SCHEDULES

9.1 To enable the Work to be performed in an orderly and expeditious manner, the Contractor, within fifteen (15) Days after the Notice to Proceed or Order to Work, unless otherwise directed by the Engineer, shall submit to the Engineer a proposed progress schedule based on the Critical Path Method in the form of a bar graph or in such other form as specified by the Engineer, and monthly cash flow requirements, showing:
9.1.1 The anticipated time of commencement and completion of each of the various operations to be performed under this Contract; and
9.1.2 The sequence and interrelation of each of these operations with the others and with those of other related contracts; and
9.1.3 The estimated time required for fabrication or delivery, or both, of all materials and equipment required for the Work, including the anticipated time for obtaining required approvals pursuant to Article 10; and
9.1.4 The estimated amount in dollars the Contractor will claim on a monthly basis.
9.2 The proposed schedule shall be revised as directed by the Engineer, until finally approved by the Engineer, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the Contractor.
9.3 If the Contractor shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional Means and Methods of Construction, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the City of a progress schedule which is shorter than the time allotted under the Contract shall not create any liability for the City if the approved progress schedule is not met.
9.4 The Contractor will not receive any payments until the proposed progress schedule is submitted.

## ARTICLE 10. REOUESTS 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 seven (7) Days after the commencement of such condition, the Contractor must notify the Engineer 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.
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, and every thirty (30) Days thereafter for as long as such damages are being incurred, the Contractor shall submit to the Commissioner verified written statements of the details and the amounts of such damages, together with documentary evidence of such damages, ("statement of delay damages") as further detailed in Article 11.6. 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. On failure of the Contractor to strictly comply with all of 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 arising under or by reason of this Contract shall not be different from or in excess of the statements made and documentation provided pursuant to this Article 11.
11.1.3 Within 60 days of submission of the final verified statement of claims pursuant to Article 44, the Commissioner shall make a determination as to whether a compensable delay has occurred and, if so, the amount of compensation due the Contractor. Notwithstanding the above, the Commissioner may make a determination as to whether a compensable delay has occurred at any time after the Contractor's first submission of a statement of delay damages provided, however, that the amount of compensation due to the Contractor will not be determined until the Commissioner determines that the Work is delayed after the date set for substantial completion.
11.2 Failure of the Contractor to strictly comply with the requirements of Article 11.1.1 may, in the discretion of the Commissioner, be deemed sufficient cause to deny any extension of time on account of delay arising out of such condition. Failure of the Contractor to strictly comply with the requirements of Articles 11.1.1 and 11.1.2 shall be deemed a conclusive waiver by the Contractor of any and all claims for damages for delay arising from such condition and no right to recover on such claims shall exist.
11.3 When appropriate and directed by the Engineer, the progress schedule shall be revised by the Contractor until finally approved by the Engineer. The revised progress schedule must be strictly adhered to by the Contractor.

### 11.4 Compensable Delays

11.4.1 The Contractor agrees to make claim only for additional costs attributable to delay in the performance of this Contract necessarily extending the time for completion of the Work or resulting from acceleration directed by the Commissioner and required to maintain the Project 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, 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 Extended delays attributable to the City in the review or issuance of change orders, in shop drawing reviews and approvals or as a result of the cumulative impact of multiple change orders, which have a verifiable impact on Project costs.
11.4.1.3 The unavailability of the Site for an extended period of time that significantly affects the scheduled completion of the Contract.
11.4.1.4 The issuance by the Engineer of a stop work order relative to a substantial portion of the Work for a period exceeding thirty (30) Days, that was not brought about through any action or omission of the Contractor.
11.4.1.5 Differing site conditions that were neither known nor reasonably ascertainable on a pre-bid inspection of the Site or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the Project's geographical area or neighborhood or in the type of Work to be performed.
11.4.1.6 Delays caused by the City's bad faith or its willful, malicious, or grossly negligent conduct;
11.4.1.7 Delays not contemplated by the parties;
11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the Contract by the City; and
11.4.1.9 Delays resulting from the City's breach of a fundamental obligation of the Contract.
11.4.2 No claim may be made for any alleged delay in Substantial Completion of the Work by a date earlier than the date of Substantial Completion provided for in Schedule A unless there is a provision in the Contract providing for additional compensation for early completion. No claim may be made for any alleged delay in Substantial Completion of the Work if the work 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.
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 generally recognized 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 action 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 amount of additional compensation sought and a breakdown of that amount into categories as described in Article 26.2, subject to the limitations set forth 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 Insurance and bond costs;
11.7.1.5 Extended field office costs;
11.7.1.6 Extended Site overhead; and
11.7.1.7 Extended home office overhead.
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 11.7.1.6, and an
additional overhead of five (5\%) percent of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.
11.7.3 Non-Recoverable Costs. The parties agree that the City will have no liability for the following items and the Contractor agrees it shall make no claim for the following items:
11.7.3.1 Profit, or loss of anticipated or unanticipated profit;
11.7.3.2Consequential damages, including but not limited to interest on monies in dispute, including interest which is paid on such monies, 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;
11.7.3.4 Direct or indirect costs attributable to performance of Work where the Contractor, because of situations or conditions within its control, has not progressed the Work in a satisfactory manner; and
11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.
11.8 Determinations 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 If the parties agree, pursuant to Article 11.1.3 above, that a compensable delay has occurred and agree on the amount of compensation, payment may be made pursuant to a written change order. Payment pursuant to such change order is subject to pre-audit by the Engineering Audit Officer, and may be post-audited by the Comptroller and/or the Agency.

## ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

12.1 During the progress of the Work, Other Contractors may be engaged in performing other work or may be awarded other contracts for additional work on this Project. In that event, the Contractor shall coordinate the Work to be done hereunder with the work of such Other Contractors and the Contractor shall fully cooperate with such Other Contractors and carefully fit its own Work to that provided under other contracts as may be directed by the Engineer. The Contractor shall not commit or permit any act which will interfere with the performance of work by any Other Contractors.
12.2 If the Engineer determines that the Contractor is failing to coordinate its Work with the work of Other Contractors as the Engineer has directed, then the Commissioner shall have the right to withhold any payments otherwise due hereunder until the Contractor completely complies with the Engineer's directions.
12.3 The Contractor shall notify the Engineer in writing if any Other Contractor on this Project is failing to coordinate its work with the Work of this Contract. If the Engineer finds such charges to be true, the Engineer shall promptly issue such directions to the Other Contractor with respect thereto as the situation may require. The City shall not, however, be liable for any damages suffered by any Other Contractor's failure to coordinate its work with the Work of this Contract or by reason of the Other Contractor's failure to promptly comply with the directions so issued by the Engineer, or by reason of any Other Contractor's default in performance, it being understood that the City does not guarantee the responsibility or continued efficiency of any contractor. The Contractor agrees to make no claim against
the City for any damages relating to or arising out of any directions issued by the Engineer pursuant to this Article 12 (including but not limited to the failure of any Other Contractor to comply or promptly comply with such directions), or the failure of the Engineer to issue any 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 Contractor under the provision similar to the following provisions which apply to this Contract and have been or will be inserted in the contracts with such Other Contractors:
12.5.1 Should any Other Contractor having or who shall hereafter have a contract with the City for the performance of work upon the Site sustain any damage through any act or omission of the Contractor hereunder or through any act or omission of any Subcontractor of the Contractor, the Contractor agrees to reimburse such Other Contractor for all such damages and to defend at its own expense any action based upon such claim and if any judgment or claim (even if the allegations of the action are without merit) against the City shall be allowed the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and agrees to indemnify and hold the City harmless from all such claims. Insofar as the facts and Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent provided by Law.
12.6 The City's right to indemnification hereunder shall in no way be diminished, waived or discharged by its recourse to assessment of liquidated damages as provided in Article 15, or by the exercise of any other remedy provided for by Contract or by Law.

## ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE

13.1 If performance by the Contractor is delayed for a reason set forth in Article 13.3, the Contractor may be allowed a reasonable extension of time in conformance with this Article 13 and the PPB Rules.
13.2 Any extension of time may be granted only by the ACCO or by the Board for the Extension of Time (hereafter "Board") (as set forth below) upon written application by the Contractor.
13.3 Grounds for Extension: If such application is made, the Contractor shall be entitled to an extension of time for delay in completion of the Work caused solely:
13.3.1 By the acts or omissions of the City, its officials, agents or employees; or

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

13.3.3 By supervening conditions entirely beyond the control of either party hereto (such as, but not limited to, acts of God or the public enemy, excessive inclement weather, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the Contractor).
13.3.4 The Contractor shall, however, be entitled to an extension of time for such causes only for the number of Days of delay which the ACCO or the Board may determine to be due solely to such causes, and then only if the Contractor shall have strictly complied with all of the requirements of Articles 9 and 10 .
13.4 The Contractor shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the Work as determined by the ACCO or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the Contractor or of its Subcontractors or Materialmen, and would of itself (irrespective of the concurrent causes) have delayed the Work, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.
13.5 The determination made by the ACCO or the Board on an application for an extension of time shall be binding and conclusive on the Contractor.
13.6 The ACCO or the Board acting entirely within their discretion may grant an application for an extension of time for causes of delay other than those herein referred.
13.7 Permitting the Contractor to continue with the Work after the time fixed for its completion has expired, or after the time to which such completion may have been extended has expired, or the making of any payment to the Contractor after such time, shall in no way operate as a waiver on the part of the City of any of its rights under this Contract.

### 13.8 Application for Extension of Time:

13.8.1 Before the Contractor's time extension request will be considered, the Contractor shall notify the ACCO of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the ACCO identifying:
13.8.1(a) The Contractor; the registration number; and Project description;
13.8.1(b) Liquidated damage assessment rate, as specified in the Contract;
13.8.1(c) Original total bid price;
13.8.1(d) The original Contract start date and completion date;
13.8.1(e) Any previous time extensions granted (number and duration); and
13.8.1(f) The extension of time requested.
13.8.2 In addition, the application for extension of time shall set forth in detail:
13.8.2(a) The nature of each alleged cause of delay in completing the Work;
13.8.2(b) The date upon which each such cause of delay began and ended and the number of Days attributable to each such cause;
13.8.2(c) A statement that the Contractor waives all claims except for those delineated in the application, and the particulars of any claims which the Contractor does not agree to waive. For time extensions for Substantial Completion and final completion payments, the application shall include a detailed statement of the dollar amounts of each element of claim item reserved; and
13.8.2(d) A statement indicating the Contractor's understanding that the time extension is granted only for purposes of permitting continuation of Contract performance and payment for Work performed and that the City retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.
13.9 Analysis and Approval of Time Extensions:
13.9.1 For time extensions for partial payments, a written determination shall be made by the ACCO who may, for good and sufficient cause, extend the time for the performance of the Contract as follows:
13.9.1(a) If the Work is to be completed within six (6) months, the time for performance may be extended for sixty (60) Days;
13.9.1(b) If the Work is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) Days may be granted;
13.9.1(c) If the Contract period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) Days may be granted for each multiple of six (6) months involved beyond the one (1) year period; or
13.9.1(d) If exceptional circumstances exist, the ACCO may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the ACCO shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.
13.9.2 For extensions of time for Substantial Completion and final completion payments, the Engineer, in consultation with the ACCO, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this Contract). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the Agency contract file. Neither the report itself nor anything contained therein shall operate as a waiver or release of any claim the City may have against the Contractor for either actual or liquidated damages.
13.9.3 Approval Mechanism for Time Extensions for Substantial Completion or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the ACCO of the Agency, the City Corporation Counsel, and the Comptroller, or their authorized representatives.
13.9.4 Neither the granting of any application for an extension of time to the Contractor or any Other Contractor on this Project nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the Contractor or its attorneys in any action or proceeding.
13.10 No Damage for Delay: The Contractor agrees to make no claim for damages for delay in the performance of this Contract occasioned by any act or omission to act of the City or any of its representatives, except as provided for in Article 11.

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

14.1 Date for Substantial Completion: The Contractor shall substantially complete the Work within the time fixed in Schedule A of the General Conditions, or within the time to which such Substantial Completion may be extended.
14.2 Determining the Date of Substantial Completion: The Work will be deemed to be substantially complete when the two conditions set forth below have been met.
14.2.1 Inspection: The Engineer 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 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 within ten (10) Days of the 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 proposes alternative dates, then, within a reasonable time after receipt, the Engineer, in a written notification to the Contractor, shall approve the Contractor's completion dates or, if they are unable to agree, the Engineer shall establish dates for the completion of each item of Work. If the Contractor neither accepts the dates nor proposes alternative dates within ten (10) Days, the schedule proposed by the Engineer shall be deemed accepted. 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, 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 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 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 inspection if, upon such inspection, the 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 for the purpose of Substantial Completion or Final Acceptance shall be made within ten (10) 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 determines that there are items of Work still to be performed, the Contractor shall promptly perform them and then request a re-inspection. If upon re-inspection, the Engineer determines that the Work is substantially complete or finally accepted, the date of such reinspection shall be the date of Substantial Completion or Final Acceptance. Re-inspection by the 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: If the Contractor does not request inspection or reinspection of the Work for the purpose of Substantial Completion or Final Acceptance, the Engineer may initiate such inspection or re-inspection.

## ARTICLE 15. LIOUIDATED 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 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 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 <br> SUBCONTRACTS AND ASSIGNMENTS

## ARTICLE 17. SUBCONTRACTS

17.1 The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price fixed in Schedule A of the General Conditions, without prior written permission from the Commissioner. All subcontracts made by the Contractor shall be in writing. No Work may be performed by a Subcontractor prior to the Contractor entering into a written subcontract with the Subcontractor and complying with the provisions of this Article 17.
17.2 Before making any subcontracts, the Contractor shall submit a written statement to the Commissioner giving the name and address of the proposed Subcontractor; the portion of the Work and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the Commissioner; and any other information tending to prove that the proposed Subcontractor has the necessary facilities, skill, integrity, past experience, and financial resources to perform the Work in accordance with the terms and conditions of this Contract.
17.3 In addition to the requirements in Article 17.2, Contractor is required to list the Subcontractor in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip. ${ }^{1}$ For each Subcontractor listed, Contractor is required to provide the following information: maximum contract value, description of Subcontractor's Work, start and end date of the subcontract and identification of the Subcontractor's industry. Thereafter, Contractor will be required to report in the system the payments made to each Subcontractor within 30 days of making the 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.

[^4]17.4 If an approved Subcontractor elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.
17.5 The Commissioner will notify the Contractor in writing whether the proposed Subcontractor is approved. If the proposed Subcontractor is not approved, the Contractor may submit another proposed Subcontractor unless the Contractor decides to do the Work. No Subcontractor shall be permitted to enter or perform any work on the Site unless approved.
17.6 Before entering into any subcontract hereunder, the Contractor shall provide the proposed Subcontractor with a complete copy of this document and inform the proposed Subcontractor fully and completely of all provisions and requirements of this Contract relating either directly or indirectly to the Work to be performed and the materials to be furnished under such subcontract, and every such Subcontractor shall expressly stipulate that all labor performed and materials furnished by the Subcontractor shall strictly comply with the requirements of this Contract.
17.7 Documents given to a prospective Subcontractor for the purpose of soliciting the Subcontractor's bid shall include either a copy of the bid cover or a separate information sheet setting forth the Project name, the Contract number (if available), the Agency (as noted in Article 2.1.6), and the Project's location.
17.8 The Commissioner's approval of a Subcontractor shall not relieve the Contractor of any of its responsibilities, duties, and liabilities hereunder. The Contractor shall be solely responsible to the City for the acts or defaults of its Subcontractor and of such Subcontractor's officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the Contractor to the extent of its subcontract.
17.9 If the Subcontractor fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the Contractor's failure to make payments where required) to perform the Work in accordance with the terms and conditions of this Contract, the Contractor shall promptly notify the Commissioner and replace such Subcontractor with a newly approved Subcontractor in accordance with this Article 17.
17.10 The Contractor shall be responsible for ensuring that all Subcontractors performing Work at the Site maintain all insurance required by Law.
17.11 The Contractor shall promptly, upon request, file with the Engineer a conformed copy of the subcontract and its cost. The subcontract shall provide the following:
17.11.1 Payment to Subcontractors: The agreement between the Contractor and its Subcontractor shall contain the same terms and conditions as to method of payment for Work, labor, and materials, and as to retained percentages, as are contained in this Contract.
17.11.2 Prevailing Rate of Wages: The agreement between the Contractor and its Subcontractor shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.
17.11.3 Section 6-123 of the Administrative Code: Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the Contractor and a Subcontractor in excess of fifty thousand $(\$ 50,000)$ dollars shall include a provision that the Subcontractor shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 et seq.).
17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the Work.
17.12 The Commissioner may deduct from the amounts certified under this Contract to be due to the Contractor, the sum or sums due and owing from the Contractor to the Subcontractors according to the terms of the said subcontracts, and in case of dispute between the Contractor and its Subcontractor, or Subcontractors, as to the amount due and owing, the Commissioner may deduct and withhold from the amounts certified under this Contract to be due to the Contractor such sum or sums as may be claimed by such Subcontractor, or Subcontractors, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.
17.13 On contracts where performance bonds and payment bonds are executed, the Contractor shall include on each requisition for payment the following data: Subcontractor's name, value of the subcontract, total amount previously paid to Subcontractor for Work previously requisitioned, and the amount, including retainage, to be paid to the Subcontractor for Work included in the requisition.
17.14 On Contracts where performance bonds and payment bonds are not executed, the Contractor shall include with each requisition for payment submitted hereunder, a signed statement from each and every Subcontractor and/or Materialman for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the Subcontractor and/or Materialman for whom payment is requested and shall (i) verify that such Subcontractor and/or Materialman has been paid in full for all Work performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

## ARTICLE 18. ASSIGNMENTS

18.1 The Contractor shall not assign, transfer, convey or otherwise dispose of this Contract, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this Contract, unless the previous written consent of the Commissioner shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.
18.2 Such assignment, transfer, conveyance or other disposition of this Contract shall not be valid until filed in the office of the Commissioner and the Comptroller, with the written consent of the Commissioner endorsed thereon or attached thereto.
18.3 Failure to obtain the previous written consent of the Commissioner to such an assignment, transfer, conveyance or other disposition, may result in the revocation and annulment of this Contract. The City shall thereupon be relieved and discharged from any further liability to the Contractor, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the Contract, except so much as may be required to pay the Contractor's employees.
18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the Contractor for the benefit of its creditors made pursuant to the Laws of the State of New York.
18.5 This Contract may be assigned by the City to any corporation, agency or instrumentality having authority to accept such assignment.

# CHAPTER V <br> 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 requite 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
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
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.
20.4.2In 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 of the rights and remedies afforded to such persons by such section, including but not limited to, the right
CITY OF NEW YORK DDC
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.
22.1.1Commercial 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 2010 and provide completed operations coverage at least as broad as the latest edition of ISO Form CG 2037.
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 2026.
22.1.1(c) If the Work requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, at http://www.nyc.gov/html/dob/downloads/rules/1 RCNY 10108.pdf, the Contractor shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08. 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
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 9948 ) as well as proof of MCS 90.
22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this Contract. Such insurance shall be in the Contractor's name and list the City as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) non-owned disposal sites.
22.1.6(a) Coverage for the City as Additional Insured shall specifically include the City's officials and employees and be at least as broad as provided to the Contractor for this Project.
22.1.6(b) If such insurance is written on a claims-made policy, such policy shall have a retroactive date on or before the effective date of this Contract, and continuous coverage shall be maintained, or an extended discovery period exercised, for a period of not less than three (3) years from the time the Work under this Contract is completed.

### 22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the Contractor engages in marine operations in the execution of any part of the Work, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the Contractor or Subcontractor (whichever is doing this Work) and for the City (together with its officials and employees) and any other entity specified in Schedule $A$ as an Additional Insured for bodily injury and property damage arising from marine operations under this Contract. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.
22.1.7(b) Hull and Machinery Insurance: If specified in Schedule A of the General Conditions or if the Contractor engages in marine operations in the execution of any part of the Work, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Hull and Machinery Insurance with coverage for the Contractor or Subcontractor (whichever is doing this Work) and for the City (together with its officials and employees) as Additional Insured at least as broad as the latest edition of American Institute Tug Form for all tugs used under this Contract and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.
22.1.7(c) Marine Pollution Liability Insurance: If specified in Schedule A of the General Conditions or if the Contractor engages in marine operations in the execution of any part of the Work, the Contractor shall maintain, or cause the Subcontractor doing such Work to maintain, Marine Pollution Liability Insurance covering itself (or the Subcontractor doing such Work) as Named Insured and the City (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured. Coverage shall be at least as broad as that provided by the latest edition of Water Quality Insurance Syndicate Form and include, without limitation, liability arising from the discharge or substantial threat of a discharge of oil, or from the release or threatened release of a hazardous substance including injury to, or economic losses resulting from, the destruction of or damage to real property, personal property or natural resources.
22.1.8 The Contractor shall provide such other types of insurance, at such minimum limits and with such conditions, as are specified in Schedule A of the General Conditions.

### 22.2 General Requirements for Insurance Coverage and Policies:

22.2.1 All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A-/VII or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the City Corporation Counsel.
22.2.2 The Contractor shall be solely responsible for the payment of all premiums for all required policies and all deductibles and self-insured retentions to which such policies are subject, whether or not the City is an insured under the policy.
22.2.3 In his/her sole discretion, the Commissioner may, subject to the approval of the Comptroller and the City Corporation Counsel, accept Letters of Credit and/or custodial accounts in lieu of required insurance.
22.2.4 The City's limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the Contractor as Named Insured under all primary, excess, and umbrella policies of that type of coverage.
22.2.5 The Contractor may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.
22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and noncontributing 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 with coverage at least as broad as the most recent edition of ISO Forms CG 20 10, CG 20 37, and CG 20 26, as applicable; (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 Broker" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.
22.3.4 Documentation confirming renewals of insurance shall be submitted to the Commissioner prior to the expiration date of coverage of policies required under this Contract. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.
22.3.5 The Contractor shall be obligated to provide the City with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the Commissioner or the City Corporation Counsel.

### 22.4 Operations of the Contractor:

22.4.1 The Contractor shall not commence the Work unless and until all required certificates have been submitted to and accepted by the Commissioner. Acceptance by the Commissioner of a certificate does not excuse the Contractor from securing insurance
consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.
22.4.2 The Contractor shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this Contract and shall be authorized to perform Work only during the effective period of all required coverage.
22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the Contractor shall immediately stop all Work, and shall not recommence Work until authorized in writing to do so by the Commissioner. Upon quitting the Site, except as otherwise directed by the Commissioner, the Contractor shall leave all plant, materials, equipment, tools, and supplies on the Site. Contract time shall continue to run during such periods and no extensions of time will be granted. The Commissioner may also declare the Contractor in default for failure to maintain required insurance.
22.4.4 In the event the Contractor receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the Contractor shall immediately forward a copy of such notice to both the Commissioner and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the Contractor shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.
22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the Contractor shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this Contract (including notice to Commercial General Liability insurance carriers for events relating to the Contractor's own employees) no later than 20 days after such event. For any policy where the City is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The Contractor shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.
22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the Contractor shall at all times fully cooperate with the City with regard to such potential or actual claim.
22.5 Subcontractor Insurance: In the event the Contractor requires any Subcontractor to procure insurance with regard to any operations under this Contract and requires such Subcontractor to name the Contractor as an Additional Insured thereunder, the Contractor shall ensure that the Subcontractor name the City, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 2026.
22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the Commissioner (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the Commissioner's address as provided elsewhere in this Contract.
22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the Contractor waives all rights against the City, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the Contractor and/or its employees, agents, or Subcontractors.
22.8 In the event the Contractor utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the Contractor shall ensure that any such self-insurance program provides the City with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.
22.9 Materiality/Non-Waiver: The Contractor's failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this Contract or to do anything else required by this Article 22 shall constitute a material breach of this Contract. Such breach shall not be waived or otherwise excused by any action or inaction by the City at any time.
22.10 Pursuant to General Municipal Law Section 108, this Contract shall be void and of no effect unless Contractor maintains Workers' Compensation Insurance for the term of this Contract to the extent required and in compliance with the New York State Workers' Compensation Law.
22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the Contractor of any liability under this Contract, nor shall it preclude the City from exercising any rights or taking such other actions available to it under any other provisions of this Contract or Law.

## ARTICLE 23. MONEY RETAINED AGAINST CLAIMS

23.1 If any claim shall be made by any person or entity (including Other Contractors with the City on this Project) against the City or against the Contractor and the City for any of the following:
(a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the City; which in the opinion of the Comptroller may not be paid by an insurance company (for any reason whatsoever); or
(b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or
(c) Damage claimed to have been caused directly or indirectly by the failure of the Contractor to perform the Work in strict accordance with this Contract,
the amount of such claim, or so much thereof as the Comptroller may deem necessary, may be withheld by the Comptroller, as security against such claim, from any money due hereunder. The Comptroller, in his/her discretion, may permit the Contractor to substitute other satisfactory security in lieu of the monies so withheld.
23.2 If an action on such claim is timely commenced and the liability of the City, or the Contractor, or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the Contractor to be valid, the Comptroller
shall pay such judgment or admitted claim out of the monies retained by the Comptroller under the provisions of this Article 23, and return the balance, if any, without interest, to the Contractor.

## ARTICLE 24. MAINTENANCE AND GUARANTY

24.1 The Contractor shall promptly repair, replace, restore or rebuild, as the Commissioner may determine, any finished Work in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of Substantial Completion (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.
24.2 As security for the faithful performance of its obligations hereunder, the Contractor, upon filing its requisition for payment on Substantial Completion, shall deposit with the Commissioner a sum equal to one ( $1 \%$ ) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the Comptroller, or obligations of the City, which the Comptroller may approve as of equal value with the sum so required.
24.3 In lieu of the above, the Contractor may make such security payment to the City by authorizing the Commissioner in writing to deduct the amount from the Substantial Completion payment which shall be deemed the deposit required above.
24.4 If the Contractor has faithfully performed all of its obligations hereunder the Commissioner shall so certify to the Comptroller within five (5) Days after the expiration of one (1) year from the date of Substantial Completion and acceptance of the Work or within thirty (30) Days after the expiration of the guarantee period fixed in the Specifications. The security payment shall be repaid to the Contractor without interest within thirty (30) Days after certification by the Commissioner to the Comptroller that the Contractor has faithfully performed all of its obligations hereunder.
24.5 Notice by the Commissioner to the Contractor to repair, replace, rebuild or restore such defective or damaged Work shall be timely, pursuant to this article, if given not later than ten (10) Days subsequent to the expiration of the one (1) year period or other periods provided for herein.
24.6 If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged Work promptly after receiving such notice, the Commissioner shall have the right to have the Work done by others in the same manner as provided for in the completion of a defaulted Contract, under Article 51.
24.7 If the security payment so deposited is insufficient to cover the cost of such Work, the Contractor shall be liable to pay such deficiency on demand by the Commissioner.
24.8 The Engineer's certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective Work when performed by one other than the Contractor, shall be binding and conclusive upon the Contractor as to the amount thereof.
24.9 The Contractor shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this Contract in the name of the City and shall deliver same to the Commissioner. All of the City's rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the City to any subsequent purchasers of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.

## CHAPTER VI CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM

## ARTICLE 25. CHANGES

25.1 Changes may be made to this Contract only as duly authorized in writing by the Commissioner in accordance with the Law and this Contract. All such changes, modifications, and amendments will become a part of the Contract. Work so ordered shall be performed by the Contractor.
25.2 Contract changes will be made only for Work necessary to complete the Work included in the original scope of the Contract and/or for non-material changes to the scope of the Contract. Changes are not permitted for any material alteration in the scope of Work in the Contract.
25.3 The Contractor shall be entitled to a price adjustment for Extra Work performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:
25.3.1 By applicable unit prices specified in the Contract; and/or
25.3.2 By agreement of a fixed price; and/or
25.3.3 By time and material records; and/or
25.3.4 In any other manner approved by the CCPO.
25.4 All payments for change orders are subject to pre-audit by the Engineering Audit Officer and may be post-audited by the Comptroller and/or the Agency.

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

26.1 Overrun of Unit Price Item: An overrun is any quantity of a unit price item which the Contractor is directed to provide which is in excess of one hundred twenty-five ( $125 \%$ ) percent of the estimated quantity for that item set forth in the bid schedule.
26.1.1For any unit price item, the Contractor will be paid at the unit price bid for any quantity up to one hundred twenty-five ( $125 \%$ ) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the Work, the actual quantity of any unit price item required to complete the Work approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the Work will exceed the estimated quantity for that item by twentyfive ( $25 \%$ ) 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.
26.1.2If 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 therein, if any.

### 26.2.1 Necessary materials (including transportation to the Site); plus

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage
caps) and supplemental benefits; plus
26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such Extra Work; plus
26.2.4 Reasonable rental value of Contractor-owned (or Subcontractor-owned, as applicable), necessary plant and equipment other than Small Tools, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: (.035) $\times$ (HP rating) $\times$ (Fuel cost/gallon). Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75\%) percent of such rental rates; second shift shall be sixty ( $60 \%$ ) percent of the first shift rate; and third shift shall be forty ( $40 \%$ ) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. Contractor-owned (or Subcontractor-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the Contractor (or Subcontractor, as applicable), as determined by the Commissioner. In establishing cost reimbursement for non-operating Contractor-owned (or Subcontractor-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the City may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus
26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the Site, if any, provided that, in the case of non-Contractor-owned (or non-Subcontractor-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus
26.2.6 Necessary fees charged by governmental entities; plus
26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus
26.2.8 Reasonable rental costs of non-Contractor-owned (or non-Subcontractor-owned, as applicable) necessary plant and equipment other than Small Tools, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation: (.035) $\times$ (HP rating) $\times$ (Fuel cost/gallon). In lieu of renting, the City reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus
26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the City for the performance of the Extra Work which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus
26.2.10 Additional costs incurred as a result of the Extra Work for performance and payment bonds; plus
26.2.11 Twelve percent ( $12 \%$ ) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on Payroll Taxes or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus
26.2.12 Ten ( $10 \%$ ) percent of the total of items in Articles 26.2 .1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on Payroll Taxes or on the premium portion of overtime pay or on sales and personal property taxes; plus
26.2.13 Five (5\%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.
26.3 Where the Extra Work is performed in whole or in part by other than the Contractor's own forces pursuant to Article 26.2, the Contractor shall be paid, subject to pre-audit by the Engineering Audit Officer, the cost of such Work computed in accordance with Article 26.2 above, plus an additional allowance of five (5\%) percent to cover the Contractor's overhead and profit.
26.4 Where a change is ordered, involving both Extra Work and omitted or reduced Contract Work, the Contract price shall be adjusted, subject to pre-audit by the EAO, in an amount based on the difference between the cost of such Extra Work and of the omitted or reduced Work.
26.5 Where the Contractor and the Commissioner can agree upon a fixed price for Extra Work in accordance with Article 25.3.2 or another method of payment for Extra Work in accordance with Article
25.3.4, or for Extra Work ordered in connection with omitted Work, such method, subject to pre-audit by the EAO, may, at the option of the Commissioner, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the Extra Work is performed by a Subcontractor, the Contractor shall not be entitled to receive more than an additional allowance of five (5\%) percent for overhead and profit over the cost of such Subcontractor's Work as computed in accordance with Article 26.2.

## ARTICLE 27. RESOLUTION OF DISPUTES

27.1 All disputes between the City and the Contractor of the kind delineated in this Article 27.1 that arise under, or by virtue of, this Contract shall be finally resolved in accordance with the provisions of this Article 27 and the PPB Rules. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.
27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the PPB Rules, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.
27.1.2 This Article 27 shall apply only to disputes about the scope of Work delineated by the Contract, the interpretation of Contract documents, the amount to be paid for Extra Work or disputed work performed in connection with the Contract, the conformity of the Contractor's Work to the Contract, and the acceptability and quality of the Contractor's Work; such disputes arise when the Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner makes a determination with which the Contractor disagrees.
27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.
27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the Contract terms shall remain in force and the Contractor shall continue to perform Work as directed by the ACCO or the Engineer. Failure of the Contractor to continue Work as directed shall constitute a waiver by the Contractor of its claim.

### 27.4 Presentation of Disputes to Commissioner.

Notice of Dispute and Agency Response. The Contractor shall present its dispute in writing ('Notice of Dispute") to the Commissioner within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the Contract. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the Contractor relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the Contractor in the dispute was arrived at. Within thirty (30) Days after receipt of the detailed written submission comprising the complete Notice of Dispute, the Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner shall submit to the Commissioner all materials he or she deems pertinent to the dispute. Following initial submissions to the Commissioner, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise
protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the Commissioner whose decision shall be final. Willful failure of the Contractor to produce any requested material whose relevancy the Contractor has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the Contractor of its claim.
27.4.1 Commissioner Inquiry. The Commissioner shall examine the material and may, in his or her discretion, convene an informal conference with the Contractor, the ACCO, and the Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner to resolve the issue by mutual consent prior to reaching a determination. The Commissioner may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The Commissioner's ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the Commissioner participated therein. The Commissioner may or, at the request of any party to the dispute, shall compel the participation of any Other Contractor with a contract related to the Work of this Contract, and that Contractor shall be bound by the decision of the Commissioner. Any Other Contractor thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the Contractor initiating the dispute.
27.4.2 Commissioner Determination. Within thirty (30) Days after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the Commissioner shall make his or her determination and shall deliver or send a copy of such determination to the Contractor, the ACCO, and Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner, as applicable, together with a statement concerning how the decision may be appealed.
27.4.3 Finality of Commissioner's Decision. The Commissioner's decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The City may not take a petition to the Contract Dispute Resolution Board. However, should the Contractor take such a petition, the City may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the Contractor and more favorable to the City than the decision of the Commissioner. 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, of money, if any, claimed and the reasor; (ii) a copy of the written decision of the wrongly decided by the Commissioner, (iials submitted by the Contractor to the Agency, Commissioner; and (iii) a copy of all matertactor may not present to the Comptroller any including the Notice of Dispute. The Coner, except at the request of the Comptroller. material not presented to the Commissioner, except at the request
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 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 be further extended by agreement betwe The period for investigation and compromise may maximum of ninety (90) Days from the the Contractor and the Comptroller, to a Contractor may not present its petition to Comptroller's receipt of all materials. The period for investigation and compromis to the Contract Dispute Resolution Board until the compromising or adjusting any claim hereunated in this Article 27.5.4 has expired. In disregard the terms of the Contract between the parties.27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board
Dis composed of:
27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

### 27.6.2 The CCPO or his/her designee; any designee shall have the requisite background

 to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and27.6. person shall be selecter appropriate expertise who is not an employee of the City. This of individuals, established and presiding administrative law judge from a prequalified panel decision-makers in a dispute. Such individuy OATH with appropriate background to act as City or be an officer or employee of any com may have a contract or dispute with the represents persons, companies, or organizationsany or organization that does, or regularly settled or adjusted by the Comptroller wispute Resolution Board. In the event the claim has not been within thirty (30) Days thereafter, may petition period provided in this Article 27, the Contractor, Commissioner's determination.
27.7.1 Form and Content of Petition by Contractor. The Contractor shall present its
dispute to CITY Of NEW YORK DDC
include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the Contractor contends the dispute was wrongly decided by the Commissioner; (ii) a copy of the written Decision of the Commissioner, (iii) copies of all materials submitted by the Contractor to the Agency; (iv) a copy of the written decision of the Comptroller, if any, and (v) copies of all correspondence with, or written material submitted by the Contractor, to the Comptroller. The Contractor shall concurrently submit four (4) complete sets of the Petition: one set to the City Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the City Corporation Counsel. In addition, the Contractor shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the Commissioner and the Comptroller.
27.7.2 Agency Response. Within thirty (30) Days of its receipt of the Petition by the City Corporation Counsel, the Agency shall respond to the brief written statement of the Contractor and make available to the Contract Dispute Resolution Board all material it submitted to the Commissioner and Comptroller. Three (3) complete copies of the Agency response shall be provided to the Contract Dispute Resolution Board and one to the Contractor. Extensions of time for submittal of the Agency response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) Days.
27.7.3 Further Proceedings. The Contract Dispute Resolution Board shall permit the Contractor to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the Agency to present its case in response to the Contractor by submission of memoranda, briefs, and oral argument. If requested by the City Corporation Counsel, the Comptroller shall provide reasonable assistance in the preparation of the Agency's case. Neither the Contractor nor the Agency may support its case with any documentation or other material that was not considered by the Comptroller, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.
27.7.4 Contract Dispute Resolution Board Determination. Within forty-five (45) Days of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) Days, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the Contract. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.
27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the Contractor, the ACCO, the Engineer, the Comptroller, the City Corporation Counsel, the CCPO, and the PPB. A decision in favor of the Contractor shall be subject to the prompt payment provisions of the PPB Rules. The Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.
27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution
Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of Law, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.
27.8 Any termination, cancellation, or alleged breach of the Contract prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the Commissioner or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

## ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON A TIME \& MATERIALS BASIS

28.1 While the Contractor or any of its Subcontractors is performing Work on a time and material basis or Extra Work on a time and material basis ordered by the Commissioner under Article 25, or where the Contractor believes that it or any of its Subcontractors is performing Extra Work but a final determination by Agency has not been made, or the Contractor or any of its Subcontractors is performing disputed Work (whether on or off the Site), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the Contractor shall furnish the Resident Engineer daily with three (3) copies of written statements signed by the Contractor's representative at the Site showing:
28.1.1 The name, trade, and number of each worker employed on such Work or engaged in complying with such determination or order, the number of hours employed, and the character of the Work each is doing; and
28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such Work or compliance with such determination or order, and from whom purchased or rented.
28.2 A copy of such statement will be countersigned by the Resident Engineer, noting thereon any items not agreed to or questioned, and will be returned to the Contractor within two (2) Days after submission.
28.3 The Contractor and its Subcontractors, when required by the Commissioner, or the Comptroller, shall also produce for inspection, at the office of the Contractor or Subcontractor, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports, and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such Work, or in complying with such determination or order, and the amounts expended therefor, and shall permit the Commissioner and the Comptroller to make such extracts therefrom, or copies thereof, as they or either of them may desire.
28.4 In connection with the examination provided for herein, the Commissioner, upon demand therefor, will produce for inspection by the Contractor such records as the Agency may have with CITY OF NEW YORK
respect to such Extra Work or disputed Work performed under protest pursuant to order of the Commissioner, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the Contractor's claim.
28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such Work or compliance with such determination or order.

## ARTICLE 29. OMITTED WORK

29.1 If any Contract Work in a lump sum Contract, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid Contract is omitted by the Commissioner pursuant to Article 33, the Contract price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of Work omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.
29.2 If the whole of a lump sum item or units of any other item is so omitted by the Commissioner in a unit price, lump sum, or percentage-bid Contract, then no payment will be made therefor except as provided in Article 29.4.
29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of Work omitted subject to Article 29.4.
29.4 In the event the Contractor, with respect to any omitted Work, has purchased any noncancelable 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: <br> 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 for as long as such damages are incurred, 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.
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 the Contractor may be present.
30.4 Unless the information and examination required under Article 30.3 is provided by the Contractor and/or its Subcontractor upon thirty (30) Days' notice from the Commissioner or Comptroller, or upon the Commissioner's or Comptroller's written authorization to extend the time to comply, the City shall be released from all claims arising under, relating to or by reason of this Contract, except for sums certified by the Commissioner to be due under the provisions of this Contract. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the City to recover any sum in excess of the sums certified by the Commissioner to be due under or by reason of this Contract, the Contractor must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30 .
30.5 In addition, after the commencement of any action or dispute resolution procedure by the Contractor arising under or by reason of this Contract, the City shall have the right to require the Contractor to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the Contractor hereby consents to the dismissal of the action or dispute resolution
procedure.

## CHAPTER VII POWERS OF THE RESIDENT ENGINEER, THE ENGINEER OR ARCHITECT AND THE COMMISSIONER

## ARTICLE 31. THE RESIDENT ENGINEER

31.1 The Resident Engineer shall have the power to inspect, supervise, and control the performance of the Work, subject to review by the Commissioner. The Resident Engineer shall not, however, have the power to issue an Extra Work order, except as specifically designated in writing by
the Commissioner. the Commissioner.

## ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER

32.1 The Engineer or Architect or Project Manager, in addition to those matters elsewhere herein delegated to the Engineer and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the Commissioner:
32.1.1 To determine the amount, quality, and location of the Work to be paid for hereunder; and
32.1.2 To determine all questions in relation to the Work, to interpret the Contract Drawings, Specifications, and Addenda, and to resolve all patent inconsistencies or ambiguities therein; and
32.1.3 To determine how the Work of this Contract shall be coordinated with Work of Other Contractors engaged simultaneously on this Project, including the power to suspend any part of the Work, but not the whole thereof, and
32.1.4 To make minor changes in the Work as he/she deems necessary, provided such changes do not result in a net change in the cost to the City or to the Contractor of the Work to be done under the Contract; and
32.1.5 To amplify the Contract Drawings, add explanatory information and furnish additional Specifications and drawings, consistent with this Contract.
32.2 The foregoing enumeration shall not imply any limitation upon the power of the Engineer or Architect or Project Manager, for it is the intent of this Contract that all of the Work shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the Engineer or Architect or Project Manager is expressly called for herein.
32.3 The Engineer or Architect or Project Manager shall not, however, have the power to issue an Extra Work order,*except as specifically designated in writing by the Commissioner.

## ARTICLE 33. THE COMMISSIONER

33.1. The Commissioner, in addition to those matters elsewhere herein expressly made subject to his/her determination, direction or approval, shall have the power:
33.1.1 To review and make determinations on any and all questions in relation to this Contract
and its performance; and
33.1.2 To modify or change this Contract so as to require the performance of Extra Work (subject, however, to the limitations specified in Article 25) or the omission of Contract Work; and
33.1.3 To suspend the whole or any part of the Work whenever in his/her judgment such suspension is required:
33.1.3(a) In the interest of the City generally; or
33.1.3(b) To coordinate the Work of the various contractors engaged on this Project pursuant to the provisions of Article 12; or
33.1.3(c) To expedite the completion of the entire Project even though the completion of this particular Contract may thereby be delayed.

## ARTICLE 34. NO ESTOPPEL

34.1 Neither the City nor any Agency, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval; order, letter, payment or certificate made or given under or in connection with this Contract by the City, the Commissioner, the Engineer, the Resident Engineer, or any other official, agent or employee of the City, either before or after the final completion and acceptance of the Work and payment therefor:
34.1.1 From showing the true and correct classification, amount, quality or character of the Work actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the Work, or any part thereof, does not in fact conform to the requirements of this Contract; and
34.1.2 From demanding and recovering from the Contractor any overpayment made to it, or such damages as the City may sustain by reason of the Contractor's failure to perform each and every part of its Contract.

## CHAPTER VIII LABOR PROVISIONS

## ARTICLE 35. EMPLOYEES

### 35.1 The Contractor and its Subcontractors shall not employ on the Work:

35.1.1 Anyone who is not competent, faithful and skilled in the Work for which he/she shall be employed; and whenever the Commissioner shall inform the Contractor, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the Work forthwith, and shall not again be employed upon it; or
35.1.2 Any labor, materials or means whose employment, or utilization during the course of this Contract, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of Work or similar troubles by workers employed by the Contractor or its Subcontractors, or by any of the trades working in or about the buildings and premises where Work is being performed under this Contract, or by Other Contractors or their Subcontractors pursuant to other contracts, or on any other building or premises owned or operated by the City, its Agencies, departments, boards or authorities. Any violation by the Contractor of this requirement may, upon certification of the Commissioner, be considered as proper and sufficient cause for declaring the Contractor to be in default, and for the City to take action against it as set forth in Chapter X of this Contract, or such other article of this Contract as the Commissioner may deem proper; or
35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the Contractor and its Subcontractors shall not employ on the Work any apprentice, unless he/she is a registered individual, under a bona fide program
registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the Contractor as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the Comptroller of the City for the classification of Work actually performed. The Contractor or Subcontractor will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the Contract Work.
35.2 If the total cost of the Work under this Contract is at least two hundred fifty thousand ( $\$ 250,000$ ) dollars, all laborers, workers, and mechanics employed in the performance of the Contract on the public work site, either by the Contractor, Subcontractor or other person doing or contracting to do the whole or a part of the Work contemplated by the Contract, shall be certified prior to performing any Work as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.
35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,
35.3.1 The Contractor shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this Contract to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the Comptroller, or (c) the CCPO, ACCO, Agency head, or Commissioner.
35.3.2 If any of the Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.
35.3.3 The Contractor shall post a notice provided by the City in a prominent and accessible place on any site where work pursuant to the Contract is performed that contains information about:
35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the Contract; and
35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the Contract.
35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.
35.3.5 This Article 35.3 is applicable to all of the Contractor's Subcontractors having subcontracts with a value in excess of $\$ 100,000$; accordingly, the Contractor shall include this rider in all subcontracts with a value a value in excess of $\$ 100,000$.
35.4 Article 35.3 is not applicable to this Contract if it is valued at $\$ 100,000$ or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3 .5 are not applicable to this Contract if it was solicited pursuant to a finding of an emergency.

## ARTICLE 36. NO DISCRIMINATION

36.1 The Contractor specifically agrees, as required by Labor Law Section 220-e, as amended, that:
36.1.1 In the hiring of employees for the performance of Work under this Contract or any subcontract hereunder, neither the Contractor, Subcontractor, nor any person acting on behalf of such Contractor or Subcontractor, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the Work to which the employment relates;
36.1.2 Neither the Contractor, Subcontractor, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of Work under this Contract on account of race, creed, color or national origin;
36.1.3 There may be deducted from the amount payable to the Contractor by the City under this Contract a penalty of fifty ( $\$ 50.00$ ) dollars for each person for each Day during which such person was discriminated against or intimidated in violation of the provisions of this Contract; and
36.1.4 This Contract may be cancelled or terminated by the City and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.
36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this Contract.
36.2 The Contractor specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:
36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a Contract with the City or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a Contract with the City to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.
36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.
36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this Contract.
36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon conviction thereof, be punished by a fine of not more than one hundred ( $\$ 100.00$ ) dollars or by imprisonment for not more than thirty (30) Days, or both.
36.3 This Contract is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this Contract, the Contractor agrees that it:
36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and
36.3.2 Will not engage in any unlawful discrimination in the selection of Subcontractors on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and
36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status, disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and
36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and
36.3.5 Will furnish, before the award of the Contract, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the City Department of Business Services, Division of Labor Services (DLS) and will permit access to its books, records, and accounts by the DLS for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.
36.4 The Contractor understands that in the event of its noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this Contract and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the DLS, the Director of the DLS may direct the Commissioner to impose any or all of the following sanctions:
36.4.1 Disapproval of the Contractor; and/or
36.4.2 Suspension or termination of the Contract; and/or
36.4.3 Declaring the Contractor in default; and/or
36.4.4 In lieu of any of the foregoing sanctions, the Director of the DLS may impose an employment program.

In addition to any actions taken under this Contract, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a City Agency declaring the Contractor to be non-responsible in future procurements. The Contractor further agrees that it will refrain from entering into any Contract or Contract modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a Subcontractor who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.
36.5 The Contractor specifically agrees, as required by Section 6-123 of the Administrative Code, that:
36.5.1 The Contractor will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and
36.5.2 Any failure to comply with this Article 36.5 may subject the Contractor to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the Contractor to be in default, cancellation of the Contract, or any other sanction or remedy provided by Law or Contract.

## ARTICLE 37. LABOR LAW REOUIREMENTS

37.1 The Contractor shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this Contract.
37.2 The Contractor specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:
37.2.1 Hours of Work: No laborer, worker, or mechanic in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or a part of the Work contemplated by this Contract shall be permitted or required to work more than eight (8) hours in any one (1) Day, or more than five (5) Days in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.
37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the Work contemplated by this Contract as a result of such restrictions upon the number of hours and Days of labor, and the immediate commencement or prosecution or completion without undue delay of the Work is necessary for the preservation of the Site and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to
work more than eight (8) hours in any one (1) Day; or five (5) Days in any one (1) week; provided, however, that upon application of any Contractor, the Commissioner shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public Work is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.
37.2.3 Failure of the Commissioner to make such a certification to the Commissioner of Labor shall not entitle the Contractor to damages for delay or for any cause whatsoever.
37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's Work to laborers, workers, or mechanics employed upon the Work contemplated by this Contract or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the Comptroller in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the Work is being performed.
37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the Work under this Contract. In the event that a trade not listed in the Contract is in fact employed during the performance of this Contract, the Contractor shall be required to obtain from the Agency the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this Contract at the price at which the Contract was awarded.
37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the Contractor and any Subcontractor in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this Contract, shall be paid, without subsequent deduction or rebate unless expressly authorized by Law, not less than the sum mandated by Law.
37.3 Working Conditions: No part of the Work, labor or services shall be performed or rendered by the Contractor in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this Contract. Compliance with the safety, sanitary, and factory inspection Laws of the state in which the Work is to be performed shall be prima facie evidence of compliance with this Article 37.3.
37.4 Prevailing Wage Enforcement: The Contractor agrees to pay for all costs incurred by the City in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the Agency or the Comptroller, where the City discovers a failure to comply with any of the requirements of this Article 37 by the Contractor or its Subcontractor(s). The Contractor also agrees that, should it fail or refuse to pay for any such investigation, the Agency is hereby authorized to deduct from a Contractor's account an amount equal to the cost of such investigation.
37.4.1 The Labor Law Section 220 and Section $220-\mathrm{d}$, 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 $220-\mathrm{d}$, as amended.
37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the City for liquidated damages, which may be withheld from any amounts due on any contracts with the City of such party responsible, or may be recovered in actions brought by the City Corporation Counsel in the name of the City, in addition to damages for any other breach of this Contract, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this Contract. In addition, the Commissioner shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original Contractor shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the Comptroller, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the Contractor of the withholding or recovery of such sums by the City.
37.4.3 A determination by the Comptroller that a Contractor and/or its Subcontractor willfully violated Labor Law Section 220 will be forwarded to the City's five District Attorneys for review.

### 37.4.4 The Contractor's or Subcontractor's noncompliance with this Article 37.4 and

 Labor Law Section 220 may result in an unsatisfactory performance evaluation and the Comptroller may also find and determine that the Contractor or Subcontractor willfully violated the New York Labor Law.37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the Contractor is a non-responsible bidder on subsequent procurements with the City and thus a rejection of a future award of a contract with the City, as well as any other sanctions provided for by Law.
37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a Contractor or Subcontractor within any consecutive six (6) year period determining that such Contractor or Subcontractor has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such Contractor or Subcontractor shall be ineligible to submit a bid on or be awarded any public works contract with the City for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the Contractor or Subcontractor shall be ineligible to submit a bid on or be awarded any public works contract with the City for a period of five (5) years from the first final determination.
37.4.4(c) Labor Law Section 220, as amended, provides that the Contractor or Subcontractor found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the
a civil penalty in an amount not exceeding twenty-five ( $25 \%$ ) percent of the total amount found to be due.
37.5 The Contractor and its Subcontractors shall within ten (10) Days after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the Contractor and its Subcontractors engaged in the performance of this Contract are employed, notices furnished by the City, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220 h of the Labor Law, and the Contractor and its Subcontractors shall continue to keep such notices posted in such prominent and conspicuous places until Final Acceptance of the supplies, materials, equipment, or Work, labor, or services required to be furnished or rendered under this Contract.
37.6 The Contractor shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:
37.6.1 Notices Posted At Site: Post, in a location designated by the City, schedules of prevailing wages and supplements for this Project, a copy of all re-determinations of such schedules for the Project, the Workers' Compensation Law Section 51 notice, all other notices required by Law to be posted at the Site, the City notice that this Project is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the City directs the Contractor to post. The Contractor shall provide a surface for such notices which is satisfactory to the City. The Contractor shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The Contractor shall post such notices before commencing any Work on the Site and shall maintain such notices until all Work on the Site is complete; and
37.6.2 Daily Site Sign-in Sheets: Maintain daily Site sign-in sheets, and require that Subcontractors maintain daily Site sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until Final Acceptance of the supplies, materials, equipment, or Work, labor, or services to be furnished or rendered under this Contract unless exception is granted by the Comptroller upon application by the Agency. In the alternative, subject to the approval of the CCPO, the Contractor and Subcontractor may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and
37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this Contract, in a form provided by the Agency, that this Project is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the Work under this Contract is at least two hundred fifty thousand $(\$ 250,000)$ dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any Work as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any Work of this Contract and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the Contractor and all Subcontractors and all employees of suppliers entering the Site. At the time of distribution, the Contractor shall have each worker, laborer or mechanic sign a statement, in a form provided by the Agency, certifying that the worker has received the notice required by this

Article 37.6.3, which signed statement shall be maintained with the payroll records required by this Contract; and
37.6.3(a) The Contractor and each Subcontractor shall notify each worker, laborer or mechanic employed under this Contract in writing of the prevailing rate of wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and
37.6.4 Site Laminated Identification Badges: The Contractor shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the Contractor shall require as a condition of employment on the Site, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the City. The Commissioner may grant a written waiver from the requirement that the laminated identification badge include a photograph if the Contractor demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and
37.6.5 Language Other Than English Used On Site: Provide the ACCO notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the Site, at any time, speak a language other than English. The ACCO will then provide the Contractor the notices described in Article 37.6.1 in that language or languages as may be required. The Contractor is responsible for all distributions under this Article 37; and
37.6.6 Provision of Records: The Contractor and Subcontractor(s) shall produce within five (5) Days on the Site of the Work and upon a written order of the Engineer, the Commissioner, the ACCO, the Agency EAO, or the Comptroller, such records as are required to be kept by this Article 37.6 ; and
37.6.7 The Contractor and Subcontractor(s) shall pay employees by check or direct deposit. If this Contract is for an amount greater than one million ( $\$ 1,000,000$ ) dollars, checks issued by the Contractor to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the Agency). For any subcontract for an amount greater than seven hundred fifty thousand $(\$ 750,000)$ dollars, checks issued by a Subcontractor to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the Agency); and
37.6.8 The failure of the Contractor or Subcontractor(s) to comply with the provisions of Articles 37.6 .1 through $\mathbf{3 7 . 6 . 7}$ 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 CITY OF NEW YORK

DDC

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 <br> PARTIAL AND FINAL PAYMENTS

## ARTICLE 40. CONTRACT PRICE

40.1 The City shall pay, and the Contractor agrees to accept, in full consideration for the Contractor's performance of the Work subject to the terms and conditions hereof, the lump sum price or unit prices for which this Contract was awarded, plus the amount required to be paid for any Extra Work ordered by the Commissioner under Article 25, less credit for any Work omitted pursuant to Article 29.

## ARTICLE 41. BID BREAKDOWN ON LUMP SUM

41.1 Within fifteen (15) Days after the commencement date specified in the Notice to Proceed or Order to Work, unless otherwise directed by the Resident Engineer, the Contractor shall submit to the Resident Engineer a breakdown of its bid price, or of lump sums bid for items of the Contract, showing the various operations to be performed under the Contract, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the Resident Engineer.
41.2 No partial payment will be approved until the Contractor submits a bid breakdown that is acceptable to the Resident Engineer.
41.3 The Contractor shall also submit such other information relating to the bid breakdown as directed by the Resident Engineer. Thereafter, the breakdown may be used only for checking the Contractor's applications for partial payments hereunder, but shall not be binding upon the City, the Commissioner, or the Engineer for any purpose whatsoever.

## ARTICLE 42. PARTIAL PAYMENTS

42.1 From time to time as the Work progresses satisfactorily, but not more often than once each calendar month (except where the Commissioner approves in writing the submission of invoices on a more frequent basis and for invoices relating to Work performed pursuant to a change order), the Contractor may submit to the Engineer a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the Work done during the payment period.
42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the Work, as the Commissioner may approve, and upon the terms and conditions set forth in the General Conditions.
42.3 The Contractor shall also submit to the Commissioner in connection with every application for partial payment a verified statement in the form prescribed by the Comptroller setting forth the information required under Labor Law Section 220-a.
42.4 Within thirty (30) Days after receipt of a satisfactory payment application, and within sixty (60) Days after receipt of a satisfactory payment application in relation to Work performed pursuant to a change order, the Engineer will prepare and certify, and the Commissioner will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the Commissioner under the terms of this Contract or by Law.

## ARTICLE 43. PROMPT PAYMENT

43.1 The Prompt Payment provisions of the PPB Rules in effect at the time of the bid will be applicable to payments made under this Contract. The provisions require the payment to the Contractor of interest on payments made after the required payment date, except as set forth in the PPB Rules.
43.2 The Contractor shall submit a proper invoice to receive payment, except where the Contract provides that the Contractor will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.
43.3 Determination of interest due will be made in accordance with the PPB Rules.
43.4 If the Contractor is paid interest, the proportionate share(s) of that interest shall be forwarded by the Contractor to its Subcontractor(s).
43.5 The Contractor shall pay each Subcontractor or Materialman not later than seven (7) Days after receipt of payment out of amounts paid to the Contractor by the City for Work performed by the

## Subcontractor or Materialman under this Contract.

43.5.1 If Contractor fails to make any payment to any Subcontractor or Materialman within seven (7) Days after receipt of payment by the City pursuant to this Article 43.5, then the Contractor shall pay interest on amounts due to such Subcontractor or Materialman at the rate of interest in effect on the date such payment is made by the Contractor computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the Day immediately following the expiration of the seventh Day following receipt of payment by the Contractor from the City and shall end on the date on which payment is made.
43.6 The Contractor shall include in each of its subcontracts a provision requiring each Subcontractor to make payment to each of its Subcontractors or Materialmen for Work performed under this Contract in the same manner and within the same time period set forth above.

## ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT

44.1 The Contractor shall submit with the Substantial Completion requisition:
44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the PPB Rules and this Contract and any and all alleged claims against the City, in any way connected with or arising out of this Contract (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each
such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the Contractor claims the performance of the Work or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.
44.1.1(a) With respect to each such claim, the Commissioner, the Comptroller and, in the event of litigation, the City Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the Contractor's books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the Contractor from the obligation of complying strictly with Articles 11, 27, 28, and 30. The Contractor is warned that unless such claims are completely set forth as herein required, the Contractor upon acceptance of the Substantial Completion payment pursuant to this Article 44 , will have waived any such claims.

### 44.1.2 A Final Approved Punch List.

44.1.3 Where required, a request for an extension of time to achieve Substantial
Completion or final extension of time.
44.2 The Commissioner shall issue a voucher calling for payment of any part or all of the balance due for Work performed under the Contract, including monies retained under Article 21, less any and all deductions authorized to be made by the Commissioner, under this Contract or by Law, and less twice the amount the Commissioner considers necessary to ensure the completion of the balance of the Work by the Contractor. Such a payment shall be considered a partial and not a final payment. No Substantial Completion payment shall be made under this Article 44 where the Contractor failed to complete the Work within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of Work have been acted upon pursuant to Article 13.
44.3 No further partial payments shall be made to the Contractor after Substantial Completion, except the Substantial Completion payment and payment pursuant to any Contractor's requisition that were properly filed with the Commissioner prior to the date of Substantial Completion; however, the Commissioner may grant a waiver for further partial payments after the date of Substantial Completion to permit payments for change order Work and/or release of retainage and deposits pursuant to Articles
21 and 24 . Such waiver shall be in writing. 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 CITY OF NEW YORK 61 STANDARD CONSTRUCTION CONTRACT
claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the verified statement filed with the Contractor's substantial and final requisitions pursuant to Articles 44
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, $\mathrm{d} / \mathrm{b} / \mathrm{a}$ the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this Contract unless and until the Public Design Commission shall certify that the design for the Work herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the City Charter, as amended.

## CHAPTER X CONTRACTOR'S DEFAULT

## ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT

48.1 In addition to those instances specifically referred to in other Articles herein, the Commissioner shall have the right to declare the Contractor in default of this Contract if:

> 48.1.1 The Contractor fails to commence Work when notified to do so by the Commissioner; or if
48.1.2 The Contractor shall abandon the Work; or if
48.1.3 The Contractor shall refuse to proceed with the Work when and as directed by the Commissioner; or if
48.1.4 The Contractor shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the Commissioner, to complete the Work in accordance with the progress schedule; or if
48.1.5 The Contractor shall fail or refuse to increase sufficiently such working force when ordered to do so by the Commissioner; or if
48.1.6 The Contractor shall sublet, assign, transfer, convert or otherwise dispose of this Contract other than as herein specified; or sell or assign a majority interest in the Contractor; or if
48.1.7 The Contractor fails to secure and maintain all required insurance; or if
48.1.8 A receiver or receivers are appointed to take charge of the Contractor's property or affairs; or if
48.1.9 The Commissioner shall be of the opinion that the Contractor is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the Work, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if
48.1.10 The Commissioner shall be of the opinion that the Contractor is or has been willfully or in bad faith violating any of the provisions of this Contract; or if
48.1.11 The Commissioner shall be of the opinion that the Work cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the Commissioner's opinion, attributable to conditions within the Contractor's control; or if
48.1.12 The Work is not completed within the time herein provided therefor or within the time to which the Contractor may be entitled to have such completion extended; or if
48.1.13 Any statement or representation of the Contractor in the Contract or in any document submitted by the Contractor with respect to the Work, the Project, or the Contract (or for purposes of securing the Contract) was untrue or incorrect when made; or if
48.1.14 The Contractor or any of its officers, directors, partners, five (5\%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the PPB Rules.
48.2 Before the Commissioner shall exercise his/her right to declare the Contractor in default, the Commissioner shall give the Contractor an opportunity to be heard, upon not less than two (2) Days notice.

## ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT

49.1 The right to declare the Contractor in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the Contractor a notice, signed by the Commissioner, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").
49.2 The Commissioner's determination that the Contractor is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the Contractor from commencing a plenary action for any damages relating to the Contract. If the Contractor protests the determination of the Commissioner, the Contractor may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

## ARTICLE 50. QUITTING THE SITE

50.1 Upon receipt of such notice the Contractor shall immediately discontinue all further operations under this Contract and shall immediately quit the Site, leaving untouched all plant, materials, equipment, tools, and supplies then on the Site.

## ARTICLE 51. COMPLETION OF THE WORK

51.1 The Commissioner, after declaring the Contractor in default, may then have the Work completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the Contractor's plant, materials, equipment, tools, and supplies remaining on the Site, and also such Subcontractors, as he/she may deem advisable.
51.2 After such completion, the Commissioner shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the Contract) from the date when the Work should have been completed by the Contractor in accordance with the terms hereof to the date of actual completion of the Work. Such certificate shall be binding and conclusive upon the Contractor, its sureties, and any person claiming under the Contractor, as to the amount thereof.
51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the Commissioner, and any liquidated damages assessed against the Contractor, shall be charged against and deducted out of monies which are earned by the Contractor prior to the date of default. Should the expense of such completion, as certified by the Commissioner, exceed the total sum which would have been payable under the Contract if it had been completed by the Contractor, any excess shall be paid by the Contractor.

## ARTICLE 52. PARTIAL DEFAULT

52.1 In case the Commissioner shall declare the Contractor in default as to a part of the Work only, the Contractor shall discontinue such part, shall continue performing the remainder of the Work in strict conformity with the terms of this Contract, and shall in no way hinder or interfere with any Other

Contractor(s) or persons whom the Commissioner may engage to complete the Work as to which the Contractor was declared in default.
52.2 The provisions of this Chapter relating to declaring the Contractor in default as to the entire Work shall be equally applicable to a declaration of partial default, except that the Commissioner shall be entitled to utilize for completion of the part of the Work as to which the Contractor was declared in default only such plant, materials, equipment, tools, and supplies as had been previously used by the Contractor on such part.

## ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK

53.1 In completing the whole or any part of the Work under the provisions of this Chapter X , the Commissioner shall have the power to depart from or change or vary the terms and provisions of this Contract, provided, however, that such departure, change or variation is made for the purpose of reducing the time or expense of such completion. Such departure, change or variation, even to the extent of accepting a lesser or different performance, shall not affect the conclusiveness of the Commissioner's certificate of the cost of completion referred to in Article 51, nor shall it constitute a defense to an action to recover the amount by which such certificate exceeds the amount which would have been payable to the Contractor hereunder but for its default.

## ARTICLE 54. OTHER REMEDIES

54.1 In addition to the right to declare the Contractor in default pursuant to this Chapter X , the Commissioner shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list Work that remains after the completion date specified in the Final Approved Punch List. A written notice of the exercise of this right shall be sent to the Contractor who shall immediately quit the Site in accordance with the provisions of Article 50.
54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the Commissioner, shall be charged against and deducted out of monies which have been earned by the Contractor prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this Contract, to be paid to the Contractor without interest after such completion. Should the expense of such completion, as certified by the Commissioner, exceed the total sum which would have been payable under the Contract if it had been completed by the Contractor, any excess shall be paid by the Contractor.
54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under Law or in equity.
54.4 The exercise by the City of any remedy set forth herein shall not be deemed a waiver by the City of any other legal or equitable remedy contained in this Contract or provided under Law.

## CHAPTER XI MISCELLANEOUS PROVISIONS

## ARTICLE 55. CONTRACTOR'S WARRANTIES

55.1 In consideration of, and to induce, the award of this Contract to the Contractor, the Contractor represents and warrants:
55.1.1 That it is financially solvent, sufficiently experienced and competent to perform the Work; and
55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and
55.1.3 That it has read and complied with all requirements set forth in the Contract.

## ARTICLE 56. CLAIMS AND ACTIONS THEREON

56.1 Any claim, that is not subject to dispute resolution under the PPB Rules or this Contract, against the City for damages for breach of Contract shall not be made or asserted in any action, unless the Contractor shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.
56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after Substantial Completion; except that:
56.2.1 Any claims arising out of events occurring after Substantial Completion and before Final Acceptance of the Work shall be asserted within six (6) months of Final Acceptance of the Work;
56.2.2 Any claims for monies deducted, retained or withheld under the provisions of this Contract shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and
56.2.3 If the Commissioner exercises his/her right to terminate the Contract pursuant to Article 64, any such action shall be commenced within six (6) months of the date the Commissioner exercises said right.

## ARTICLE 57. INFRINGEMENT

57.1 The Contractor shall be solely responsible for and shall defend, indemnify, and hold the City harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the City may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the Contractor of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the Contractor and/or its Subcontractors in the performance or completion of the Work. Insofar as the facts or Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent permitted by Law.

## ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the Contractor against any official, agent or employee of the City for, or on account of, anything done or omitted to be done in connection with this Contract.

## ARTICLE 59. SERVICE OF NOTICES

59.1 The Contractor hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the Contractor may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage prepaid 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 CITY OF NEW YORK
though it is consumed, is not incorporated into the completed Work (consumable supplies) and tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work. The Contractor and its Subcontractors and Materialmen shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work.
62.2 The Contractor agrees to sell and the City agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work, that is required, necessary or proper for or incidental to the construction of the Project covered by this Contract. The sum paid under this Contract for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.
62.2.1 The Contractor agrees to construct the Project and to perform all Work, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such Work, labor, and services, and the sum so paid pursuant to this Contract for such Work, labor, and services, shall be in full consideration for the performance by the Contractor of all its duties and obligations under this Contract in connection with said Work, labor, and services.
62.3 20 NYCRR Section 541.3(d) provides that a Contractor's purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The City shall not pay sales tax for any such tangible personal property that it purchases from the Contractor pursuant to the Contract. With respect to such tangible personal property, the Contractor, at the request of the City, shall furnish to the City such bills of sale and other instruments as may be required by the City, properly executed, acknowledged and delivered assuring to the City title to such tangible personal property, free of liens and/or encumbrances, and the Contractor shall mark or otherwise identify all such tangible personal property as the property of the City.
62.4 Title to all tangible personal property to be sold by the Contractor to the City pursuant to the provisions of the Contract shall immediately vest in and become the sole property of the City upon delivery of such tangible personal property to the Site. Notwithstanding such transfer of title, the Contractor shall have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this Contract, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the City, until such time as the Work covered by the Contract is fully accepted by the City. Such transfer of title shall in no way affect any of the Contractor's obligations hereunder. In the event that, after title has passed to the City, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the Contractor.
62.5 The purchase by Subcontractors or Materialmen of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the Contractor (either directly or through other Subcontractors) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this Contract with respect to the separation of the sale of consumable supplies and tangible personal property that the Contractor is required to remove from the Site during or upon completion of the Work from the Work and labor, services, and any other matters to be provided, and provided further that the subcontracts and
purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other Work and labor and other things to be provided.
62.6 The Contractor and its Subcontractors and Materialmen shall furnish a Contractor Exempt Purchase Certificate to all persons, firms or corporations from which they purchase tangible personal property for the performance of the Work covered by this Contract.
62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this Contract or create any ambiguity, then the provisions of this Article 62 shall control.

## ARTICLE 63. INVESTIGATION(S) CLAUSE

63.1 The parties to this Contract agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a City governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.
63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the City, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the City, or any public benefit corporation organized under the Laws of the State of New York, or,
63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a City or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the City, the State, or any political subdivision thereof or any local development corporation within the City, then;
63.4 The Commissioner whose Agency is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) Days' written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.
63.5 If any non-governmental party to the hearing requests an adjournment, the Commissioner who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the City incurring any penalty or damages for delay or otherwise.
63.6 The penalties which may attach after a final determination by the Commissioner may include but shall not exceed:
63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at entering into or obty 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 hearing, without the City incurring any penior to the issuance of the notice scheduling the or termination; monies lawfully due for goods or damages on account of such cancellation prior to the cancellation or termination shall be paid by the City
63.7
assessing an appropriate penalty the fansider and address in reaching his/her determination and in consider, if relevant and appropriate, the criteria established in and 63.7.2. The Commissioner may also any other information which may be relevant and appropriate:
63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.
63.7.2 The relationship of the person who refused to testify to any entity that is a party to the hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the
person has within the entity. person has within the entity.
63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the City.
63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Article 63.6, provided that the party or entity has given actual notice to the Commissioner upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest at the hearing demonstratinger either circumstance the party or entity shall present evidence 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 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 (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 dollars; and
64.2.1(c)(ii) Three (3\%) percent of any amount between five million ( $\$ 5,000,000$ ) dollars and fifteen million ( $\$ 15,000,000$ ) dollars; plus
64.2.1(c)(iii) One (1\%) percent of any amount over fifteen million ( $\$ 15,000,000$ ) dollars.
64.2.1(d) In the event the City terminates a lump sum Contract pursuant to this Article 64 within ninety (90) Days after registration of the Contract with the Comptroller, the Contractor shall be paid one (1\%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.
64.2.2 Unit Price Contracts or Items: On all unit price Contracts, or on unit price items.in a Contract, the City will pay the Contractor the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this Contract:
64.2.2(a) For all completed units, the unit price stated in the Contract, and
64.2.2(b) For units that have been ordered but are only partially completed, the Contractor will be paid:
64.2.2(b)(i) A pro rata portion of the unit price stated in the Contract based upon the percent completion of the unit and
64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).
64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all CITY OF NEW YORK

DDC
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 action efforts and develop a timetable to ensure their full implementation.
69.4 The Contractor agrees that the covenants and representations in Article 69.2 are material conditions to this Contract. In the event the Agency receives information that the Contractor who made the stipulation required by this Article 69 is in violation thereof, the Agency shall review such information and give the Contractor an opportunity to respond. If the Agency finds that a violation has occurred, the Agency shall have the right to declare the Contractor in default in default and/or terminate this Contract for cause and procure supplies, services or Work from another source in the manner the Agency deems proper. In the event of such termination, the Contractor shall pay to the Agency, or the Agency in its sole discretion may withhold from any amounts otherwise payable to the Contractor, the difference between the Contract price for the uncompleted portion of this Contract and the cost to the Agency of completing performance of this Contract either itself or by engaging another Contractor or Contractors. In the case of a requirement Contract, the Contractor shall be liable for such difference in price for the entire amount of supplies required by the Agency for the uncompleted term of Contractor's Contract. In the case of a construction Contract, the Agency shall also have the right to hold the Contractor in partial or total default in accordance with the default provisions of this Contract, and/or may seek debarment or suspension of the Contractor. The rights and remedies of the Agency hereunder shall be in addition to, and not in lieu of, any rights and remedies the Agency has pursuant to this Contract or by operation of Law.

## ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

70.1 The Contractor shall electronically file all alteration type-2 and alteration type-3 applications via the New York City Development Hub Web site, except applications for the following types of minor alterations: enlargements, curb cuts, legalizations, fire alarms, builders pavement plans, and jobs filed on Landmark Preservation Commission calendared properties. All such filings must be professionally certified. Information about electronic filing via the New York City Development Hub is available on the City Department of Buildings Web site at www.nyc.gov/buildings.

## ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

71.1 Tropical hardwoods, as defined in Section 165 of the New York State Finance Law (Finance Law), shall not be utilized in the performance of this Contract except as expressly permitted by Section 165 of the Finance Law.

## ARTICLE 72. CONFLICTS OF INTEREST

72.1 Section 2604 of the City Charter and other related provisions of the City Charter, the Administrative Code, and the Penal Law are applicable under the terms of this Contract in relation to conflicts of interest and shall be extended to Subcontractors authorized to perform Work, labor and services pursuant to this Contract and further, it shall be the duty and responsibility of the Contractor to so inform its respective Subcontractors. Notice is hereby given that, under certain circumstances, penalties may be invoked against the donor as well as the recipient of any form of valuable gift.

## ARTICLE 73. MERGER CLAUSE

73.1 The written Contract herein, contains all the terms and conditions agreed upon by the parties hereto, and no other agreement, oral or otherwise, regarding the subject matter of this Contract shall be deemed to exist or to bind any of the parties hereto, or to vary any of the terms contained herein.

## ARTICLE 74. STATEMENT OF WORK

74.1 The Contractor shall furnish all labor and materials and perform all Work in strict accordance with the Specifications and Addenda thereto, numbered $\qquad$ 3

## 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 of: formilliun three wheleed $t$ Dollars, $(\$ 4,329,914.50$, , 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. Ftwenty hime thussane hine hasthed fasertare N/50

## 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 CITY OF NEW YORK
which the Agency may waive the requirements of this Article 76 for payment 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. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

## NOTICE TO ALL PROSPECTIVE CONTRACTORS

## ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). 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. 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 I to this Contract (see Page 1, line 1 Total Participation Goals) or will be set forth on Schedule B, Part I 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 New York City Department of Small Business Services 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 II (see Pages 2-4) 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; and (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. 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 II (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 nonresponsive.
(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 II (see Pages 2-4) 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; and (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. 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 II). A SCHEDULE B SUBMITTED. BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NONRESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). 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 multiyear 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 6129(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 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) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th 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 for MBEs or the goal for WBEs, but not both. No credit shall be given for pe counted either toward the goal 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 $6-129(\mathrm{j})$, 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 toeach.
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 Utiliza 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 III (Page 5) 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 poped@ddc.nyc.gov or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted 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
(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 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 Contractor will nubcontract work to MBEs and/or WBEs in order to meet the Participation Goals, the regard to any work which was intended to of the M/WBE Program requirements for this Contract with Agency has determined that such work is not needed.
13. If Partipation Goal
13. 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 subcontractors and the paye percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.
14. 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 an M/WBE

Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6129. See $\S 6-129(\mathrm{e})(10)$. 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 an M/WBE Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Section 6108.1 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 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 promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the promulgated thereunder, all of which shantract and pertinent provisions of Section 6-129, and any rules hereby agrees to make all reasonable, good faith ed to be material terms of this Contract. The Contractor 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, bidder's or proposer's prequalification status, if applicable.

Whenever Agency believes huled pursuant to Section 6-129, or any provision of this Contract that
6 -129 or the DSBS rules promulg Utilization Plan, Agency shall implements Section 6-129, including, but not limited to any M/WBE Utiliza and offering the Contractor a ritten notice to the Contractor describing the alleged noncompliance and of whether such Contract an opportunity to be heard. Agency shall then conduct an investigation to determine wheth or subcontractor is in compliance. promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129,期 following actions should be taken:
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; be in breach of Contract;
(e) declaring the Contractor reimbursement;
(f) withholding paymen renew the Contract;
(g) determining not to renew ansequential damages;
(h) assessing actual and consequen or reducing fees, provided that liquides of the M/WBE Program, or in
(i) assessing liquidated damages of delays in carrying out the purposestion goals through additional amounts representing costs contract, the costs of meeting utilizent, or other factors set forth in meeting the purposes of the Conrats of investigation and enforcement, or other factors set the Contract; under the Contract to procure goods, services or construs 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 to Article I, Part A, Section Utilization Plan or the Participation Goals as modified ant of ten percent ( $10 \%$ ) of the difference between 11, Agency may assess liquidated damages in the am MBE and/or WBE firms to meet the Participation the dollar amount of work required to be awarded to MBE arded and paid, and/or credited, to MBE and/or Goals and the dollar amount the Contractor actually artaining the loss which the City will suffer by reason WBE firms. In view of the difficulty of accurately asals, the foregoing amount is hereby fixed and agreed as of Contractor's failure to meet the Participation Gy reason of such failure, and not as a penalty. Agency the liquidated damages that the City will suffer by reason ofome due under this Contract the amount of any may deduct and retain out of any monies which may becoma become due under this Contract shall be less such liquidated damages; and in case the amount which the City, the Contractor shall be liable to pay the than the amount of liquidated damages suffered by the City, the Contracto difference.

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 such business enterprise should be Commiss revoked. the application of any applicable criminal and/or civil penalties statement or omission shall be grounds for in addition, be grounds an MBE and/or WBE in any instrument submierjury. The making of a false or evaluation of its performance. Whenever Agency determines Utilization Plan shall be a factor in the Procurement Officer, file an advice unsatisfactory, Agency shall, after consultation compliance with an


## Deary

IN WITNESS WHEREOF, the Commissioner, on behalf of the City of New York, and the Contractor, have executed this agreement in quadruplicate, two parts of which are to remain with the Commissioner, another to be filed with the Comptroller of the City, and the fourth to be delivered to the Contractor.


CONTRACTOR:

tive:Vice President
(Where Contractor is a Corporation, add):
Attest:

(Seal)

## ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of Newifork County of Whens ss:
On this 31 day of May, 2016 , before me personally came
 to me known who, being by me $\qquad$ tor salonga, Ny that he is the. Vice PresidenT of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.


VICTORIAAYO-VAUGHAN
Notary Public, State of New York Registration \#01AY5014042 Qualified in Queens County Commission Expires duly 15,

## ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of $\qquad$ County of $\qquad$ ss:
On this $\qquad$ day of $\qquad$ , $\qquad$ , before me personally appeared $\qquad$ to me known, and known to me to be one of the members of the firm of $\qquad$ acknowledged to me that he executed the same as and for the act and deed of said firm.

Notary Public or Commissioner of Deeds

## ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of $\qquad$ County of $\qquad$ ss:

On this $\qquad$ day of $\qquad$
$\qquad$ , before me personally appeared $\qquad$ to me known, and known to me to be the person described in and who executed the foregoing instrument; and acknowledged that he executed the same.

[^5] C County of $\qquad$ ss:

On this $\qquad$ day of June Null, before me personally came Eric Macforlcone to me known, and known to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.


VICTORIAAYO-VAUGHAN
Notary Public, State of New York Registration \#01AY5014042 Qualified in Queens Count
Commission Expires July 15,

## AUTHORITY

## MAYOR'S CERTIFICATE NO. CBX BUDGET DIRECTORS CERTIFICATE NO. <br> DATED <br> DATED

## APPROPRIATION <br> COMMISSIONERS CERTIFICATE

In conformity with the provisions of Section 6-101 of the Administrative Code of the City of New York, it is hereby certified that the estimated cost of the work, materials and supplies required by the within Contract, amounting to
Formm.llon threchunded twaty
hire thousand, hone hishel fourteenclollc rs $100 / 50$.
Dollars $(\$ 4,329,914, \pi 0)$
is chargeable to the fund of the Department of Design and Construction entitled Code

$\qquad$
$\qquad$
Department of Design and Construction

I hereby certify that the specifications contained herein comply with the terms and conditions of the BUDGET.


## COMPTROLLERS CERTIFICATE

The City of New York $\qquad$
Pursuant to the provisions of Section 6-101 of the Administrative Code of the City of New York, I hereby certify that there remains unapplied and unexpended a balance of the above mentioned fund applicable to this Contract sufficient to pay the estimated expense of executing the same viz: \$ $\qquad$

Comptroller

## Performance Bond \$5 Million Or Less (SBA Approved)

PERFORMANCE BOND Bond No. 015050845

## KNOW ALL PEOPLE BY THESE PRESENTS: <br> That we. Gazebo Contracting Inc.

3-0226 Avenue, Long Island City, NY 11102
hereinafter referred to as the "Principal,"
and,
Liberty Mutual Insurance Company
1200 Macarthur Boulevard, Mahwah, NJ 07430
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 $\qquad$

Four Million Three Hundred Twenty Nine Thousand Nine Hundred Fourteen Dollars and 50/100
(\$ 4,329,914.50 ) 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 Hylan Blvd Bus Pads for Selective Bus Service-Boroughs of Brooklyn and Staten Island.
a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full:

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making

## Performance Bond $\$ 5$ Million Or Less (SBA Approved)

good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal's default of the Contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that the City has determined that the Principal is in default of the Contract, to (1) pay the City the cost to complete the contract as determined by the City in excess of the balance of the Contract held by the City, plus any damages or costs to which the City is entitled, up to the full amount of the above penal sum, (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof, or (3) tender a completion Contractor that is acceptable to the City. The Surety (Sureties) further agrees, at its option, either to notify the City that it elects to pay the city the cost of completion plus any applicable damages and costs under option (1) above, or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and, if the Surety elects to fully perform and complete the Work, then to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. If the Surety elects to tender payment pursuant to (1) above, then the Surety shall tender such amount within fifteen (15) business days notification from the City of the cost of completion. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and complete all Work as provided herein, or to tender a completion contractor.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, and waivers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to subcontractors shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal. Notwithstanding the above, if the City makes payments to the Principal before the time required by the contract that in the aggregate exceed $\$ 100,000$ or $10 \%$ of the Contract price, whichever is less, and that have not become earned prior to the Principal being found to be in default, then all payments made to the Principal before the time required by the Contract shall be added to the remaining contract value available to be paid for the completion of the Contract as if such sums had not been paid to the Principal, but shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and to complete all Work as provided herein, or to tender a completion contractor

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

## Performance Bond $\$ 5$ Million Or Less (SBA Approved)

By $\qquad$

Bond Premium Rate Scaled
Bond Premium Cost $\$ 39,447.00$

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 a duly authorized officer, agent, or attorney-in-fact.

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

## Performance Bond $\$ 5$ Million Or Less (SBA Approved)

## ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of
 County of $\qquad$ ss:

On this $\qquad$ day of MAy $\qquad$ before me personally came $\qquad$ Flange.
to me known, who, being by me duly sworn did depose and say that he/she resides

of ___the corporation described in and which executed the foregoing instrument; and that he signed his name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.


Notary Public or Commissioner of Deeds.

VICTORIA AYO-VAUGHAN
Notary Public, State of New York Registration Ho lAy 5014042 Qualified in Queens County
Commission Expires July 15,2021S

## ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of $\qquad$ County of $\qquad$ ss:

On this $\qquad$ day of $\qquad$ before me personally came $\qquad$ to me known, who, being by me duly sworn did depose and say that he/she resides at $\qquad$ _
$\qquad$ partner of a limited/general partnership existing under the laws of the State of
$\qquad$ , the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

Notary Public or Commissioner of Deeds.

## Performance Bond $\$ 5$ Million Or Less (SBA Approved)

## ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of $\qquad$ County of $\qquad$ ss:

On this $\qquad$ day of $\qquad$ before me personally came $\qquad$ to me known, who, being by me duly sworn did depose and say that he/she resides at $\qquad$ , and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

Notary Public or Commissioner of Deeds.
Affix Acknowledgments and justification of Sureties

State of $\qquad$ New York

County of $\qquad$
On this $\qquad$ day of $\qquad$ , 2016 before me personally came to me known, and known to me to be the individual in and who executed the foregoing instrument, and acknowledged to me that he/she executed the same.

My commission expires $\qquad$
Notary Public

## Corporation Acknowledgment

State of $\qquad$
County of $\qquad$
On the 31 day of MAy, 2016 before me personally came Benedetto Filinger. to me known; who being by me duly sworn, did depose and say that
$\qquad$ /they is (are) the he/she/they resides) in of the Gazebo Contractor
Vie President d above instrument; that he/she/they knows) the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said corporation, and that he/she/they signed his/her/their names) thereto by like authority.

My commission expires


VICTORIAAYO-VAUGHAN Notary Public, State of Now York Registration \#01AY5014042 Qualified in Queens County

## Surety Acknowledgment

## State of New York

## County of Nassau

On the 25tht day of May, 2016 personally came Theresa A. Lanfranco to me known, who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Liberty Mutual Insurance Company in and which executed the above Instrument knows) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

My commission expires


THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND
號
Certificate No. 7196563
American Fire and Casualty Company
The Ohio Casualty Insurance Company

## POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire \& Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Kim Spinello; Tara Laverdiere; D. J. Scotto; Dense Thompson; Frank Abbatiello; Lisa Marrazzo; Louis J. Spina; Philip G. Samuels;
Raymond C. Carman; Theresa A. Lanfranco
all of the city of Uniondale state of NY $\qquad$ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.
IN WITNESS WHEREOF, this Power of Attomey has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed day of December

Liberty Mutual Insurance Company
West American Insurance Company


American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By:


## STATE OF PENNSYLVANIA

ss COUNTY OF MONTGOMERY
On this 4 th day of December 2015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistan, sech er a Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West A mes ch himself as a duly authorized officer.
execute the foregoing instrument for the purposes therein contained by signing on
IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.
COMMONWEALTH OF PENNSYLVANIA


| Notarial Seal |
| :---: |
| Teresa Pastella, Notary Public |
| Plymouth Twp., Montgomery County |
| My Commission Expires March 28, 2017 |
| Member, Pennsylvania Association of Notaries |

By:


This Power of Attorney is made and executed pursuant to and by authority of the following Bylaws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:
ARTICLE IN - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach there executed, such instruments shall be as binding as if signed by the Board, the Chairman, the President or by the officer or officers granting such power or authority.
ARTICLE XIII - Execution of Contracts - SECTION 5 . Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings; bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.
Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-Infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.
Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.
I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 25 m $\qquad$ MM

By:



## FINANCIAL STATEMENT - DECEMBER 31, 2015

| SURETY | Liabilities |
| :---: | :---: |
| Assets | Unearned Premiums........................................ \$6,580,520,311 |
| Cash and Bank Deposits.................................... \$753,038,641 | Reserve for Claims and Claims Expense $\qquad$ 16,917,138,677 |
| *Bonds - U.S Government................................. 1,547,613,44 | Funds Held Under Reinsurance Treaties................. 210,794,503 |
| *Other Bonds.................................................... 11,088,162,545 | Reserve for Dividends to Policyholders................ 358,033 |
| *Stocks ............................................................ 9,919,835,033 | Additional Statutory Reserve.............................. 29,659,093 |
| Real Estate..................................................... 295,926,247 | Reserve for Commissions, Taxes and |
| Agents' Balances or Uncollected Premiums.......... 4,487,501,643 | Other Liabilities $\qquad$ $\mathbf{\$ 2 6 , 5 2 7 , 9 4 8 , 8 9 3}$ |
| Accrued Interest and Rents................................. 120,872,424 | Special Surplus Funds....................... \$67,890,944 |
| Other Admitted Assets........................................ 14,130,266,527 | Capital Stock........................... $10,000,000$ |
|  | Paid in Surplus......................... 8,829,183,823 |
|  | Unassigned Surplus................... 6,908,192,846 |
| Total Admitted Assets................................ \$42,343,216,506 | Surplus to Policyholders $\qquad$ 15,815,267,613 <br> Total Liabilities and Surplus $\qquad$ $\$ 42,343,216,506$ |



* Bonds are stated at amortized or investment value; Stocks at Association Market Values. The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2015, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 15 th day of March, 2016.


Assistant Secretary

KNOW ALL MEN BY THESE PRESENTS, That we, $\qquad$
Gazebo Contracting Inc.
3-02 26 Avenue, Long Island City, NY 11102
hereinafter referred to as the "Principal" and $\qquad$
Liberty Mutual Insurance Company
1200 Macarthur Boulevard, Mahwah, NJ 07430
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:

Four Million Three Hundred Twenty Nine Thousand Nine Hundred Fourteen Dollars and 50/100 Dollars,
(\$4,329,914.50 $\qquad$ ) 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: Hylan Blvd Bus Pads for Selective Bus Service-Boroughs of Brooklyn and Staten Island.
$\qquad$
$\qquad$
$\qquad$
a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full.

## PAYMENT BOND (Pg.2)

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for:
(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents, servants or employees of the Principal or of any such Subcontractors, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site of the Project regardless of any Contractual relationship between the Principal or such Subcontractors, or his or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the Project, and
(b) Materials and supplies (whether incorporated in the permanent construction or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any Subcontractors 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 null and void; otherwise to remain in full force and effect.

This bond is subject to the following additional conditions, limitations and agreements:
(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialman 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 person as party plaintiff.
(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs or

## PAYMENT BOND (Pg.3)

otherwise, obtained against either or both of them by 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 (2) years after the complete performance of said Contract and final settlement thereof.

The Principal, for himself and his successors and assigns, and the Surety (Sureties), for itself and its successors and assigns, do hereby expressly waive any objection that might be interposed as to the right of the City to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either of them might interpose to an action brought hereon by any person, firm or corporation, including Subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed, rendered, or furnished as aforesaid upon the ground that there is no law authorizing the City to require the foregoing provisions to be placed in this bond.

And the Surety (Sureties) for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond 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 or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

## PAYMENT BOND (Pg.4)

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 $\qquad$ 25th day of $\qquad$ , 2016
(SEAL)
Gazebo Contracting Inc. Principal (L.S.)

By: $\qquad$
(SEAL)
By:


By:
(SEAL)
Surety
(SEAL)
$\qquad$
By: $\overline{\text { Surety }}$
(SEAL)
Surety
By:
BOND PREMIUM RATE: Scaled
BOND PREMIUM COST: $\$ 39,447.00$
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 a duly authorized officer, agent, or attorney-infact. There should be executed an appropriate member of counterparts of the bond corresponding to the number of counterparts of the Contract.

## PAYMENT BOND (Pg.5)

## ACKNOWLEDGMENT OF PRINCIPAL - IF A CORPORATION

State of $\qquad$ County of $\qquad$ ss.:

On this $\qquad$ day of $\mathrm{NH}_{7}$ $\qquad$ , $\qquad$ ,
before me personally came Bensetto Filingeri
to me known, who, being by me, duly sworn did depose and say that he resides
at

that he is the $\qquad$ of Garth Contracts
the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed tersaid instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.


ACKNOWLEDGMENT OF PRINCIPAL - IF A PARTNERSHIP

State of $\qquad$ County of $\qquad$ ss.:

On this $\qquad$ day of $\qquad$ ,
before me personally appeared $\qquad$
to me known and known to me to be one of the members of the firm of:
described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

> Notary Public

## PAYMENT BOND (Pg.6) <br> ACKNOWLEDGMENT OF PRINCIPAL - IF AN INDIVIDUAL

State of $\qquad$ County of $\qquad$ SS.:

On this $\qquad$ day of $\qquad$ , $\qquad$ before me
personally appeared $\qquad$ known to me to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same.

Notary Public

Each executed bond should be accompanied by:
(a) appropriate acknowledgments of the respective parties;
(b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety;
(c) a duly certified extract from by-laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and
(d) a duly certified copy of latest published financial statement of assets and liabilities of Surety.

## Individual Acknowledgment

State of $\qquad$ New York

County of $\qquad$
On this $\qquad$ day of $\qquad$ 2016 before me personally came to me known, and known to me to be the individual in and who executed the foregoing instrument, and acknowledged to me that he/she executed the same.

My commission expires $\qquad$ Notary Public

## Corporation Acknowledgment

State of $\qquad$
County of $\qquad$
On the $3 x$ day of MAC_ 2016 before me personally came Benedelt Filnges. to me known; who being by me duly sworn, did depose and say that he/she/theygesidess) in 10 Geken Krill CT, Fort ialonga m/li76, that he/she/they is (are) the Vie presides of the GArbo Corker, , the corporation described in and which executed the above instrument; that he/she/they knows) the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said corporation, and that he/she/they signed his/her/their names) thereto by like authority.


## State of New York

## County of Nassau

On the 25tht day of May, 2016 personally came Theresa A. Lanfranco to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Liberty Mutual Insurance Company in and which executed the above Instrument knows) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

My commission expires $\qquad$


RAYMOND C. CARMAN

American Fire and Casualty Company<br>The Ohio Casualty Insurance Company<br>Liberty Mutual Insurance Company West American Insurance Company

## POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire \& Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company s a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Kim Spinello; Tara Laverdiere; D. J. Scotto; Dense Thompson; Frank Abbatiello; Lisa Marrazzo; Louis J. Spina; Philip G, Samuels;
Raymond C. Carman; Theresa A. Lanfranco
all of the city of Uniondale
state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.
IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed
thereto this_ 4th day of December $\quad 2015$


STATE OF PENNSYLVANIA
ss COUNTY OF MONTGOMERY
On this th day of December $\because 201$ 015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.
IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.


COMMONWEALTH OF PENNSYLVANIA

## Notarial Seal <br> Teresa Pastella Notary Public

 Plymouth Twp., Montgomery County My Commission Expires March 28, 2017. Member Pennsylvania Association of NotariesThis Power of Attorney is made and executed pursuant to and by authority of the following Bylaws and Authorizations of American Fire and Casualty Company
Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:
ARTICLE N - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.
ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attomeys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-lact subject to the limitations set forth in their executed such instruments shall be as binding as if signed by the president and attested by the secretary.
Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.
Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.
I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 7 n day of


By:

## FINANCIAL STATEMENT — DECEMBER 31, 2015

SURETY

## Assets

## Liabilities

| Assets |  |
| :---: | :---: |
| Cash and Bank Deposits.................................. | \$753,038,641 |
| *Bonds - U.S Government | 1,547,613,446 |
| *Other Bonds.. | 11,088,162,545 |
| *Stocks | 9,919,835,033 |
| Real Estate. | 295,926,247 |
| Agents' Balances or Uncollected Premiums.......... | 4,487,501,643 |
| Accrued Interest and Rents................................ | 120,872,424 |
| Other Admitted Assets....................................... | $\underline{14,130,266,527}$ |

## Total Admitted Assets. <br> $\$ 42,343,216,506$

| Liabilities |  |
| :---: | :---: |
| Unearned Premiums. | \$6,580,520,311 |
| Reserve for Claims and Claims Expense ... | 16,917,138,677 |
| Funds Held Under Reinsurance Treaties... | 210,794,503 |
| Reserve for Dividends to Policyholders.. | 358,033 |
| Additional Statutory Reserve | 29,659,093 |
| Reserve for Commissions, Taxes and |  |
| Other Liabilities | 2,789,478,276 |
| Total .........................................................\$26,527,948,893 |  |
| Special Surplus Funds................ \$67,890,944 |  |
| Capital Stock........................... 10,000,000 |  |
| Paid in Surplus......................... 8,829,183,823 |  |
| Unassigned Surplus...................6,908,192,846 |  |
| Surplus to Policyholders ........................... 15,815,267,613 |  |
| Total Liabilities and Surplus ........................... | \$42,343,216,506 |



* Bonds are stated at amortized or investment value; Stocks at Association Market Values. The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2015, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 15 th day of March, 2016.


Assistant Secretary

# NYSIF New York State Insurance Fund 

Workers' Compensation \& Disability Benefits Specialists Since 1914
199 CHURCH STREET, NEW YORK, N.Y. 10007-1100
Phone: (888) 997-3863

## CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

112786038
LOVELL SAFETY MGMT CO., LLC
110 WILLIAM STREET 12TH FLR
NEW YORK NY 10038

POLICYHOLDER
GAZEBO CONTRACTING INC
3-02 26TH AVE
LONG ISLAND CITY NY 11102

CERTIFICATE HOLDER
NEW YORK CITY DEPARTMENT OF
DESIGN \& CONSTRUCTION
30-30 THOMSON AVENUE
LONG ISLAND CITY NY 11101

| POLICY NUMBER | CERTIFICATE NUMBER | PERIOD COVERED BY THIS CERTIFICATE | DATE |
| :---: | :---: | :---: | :---: |
| G $897243-2$ | 477223 | $04 / 01 / 2016$ TO 04/01/2017 | $6 / 10 / 2016$ |

THIS IS TO CERTIFY THAT THE POLICYHOLDER NAMED ABOVE IS INSURED WITH THE NEW YORK STATE INSURANCE FUND UNDER POLICY NO. 897 243-2 UNTIL 04/01/2017, COVERING THE ENTIRE OBLIGATION OF THIS POLICYHOLDER FOR WORKERS' COMPENSATION UNDER THE NEW YORK WORKERS' COMPENSATION LAW WITH RESPECT TO ALL OPERATIONS IN THE STATE OF NEW YORK, EXCEPT AS INDICATED BELOW.

IF SAID POLICY IS CANCELLED, OR CHANGED PRIOR TO 04/01/2017 IN SUCH MANNER AS TO AFFECT THIS CERTIFICATE, 30 DAYS WRITTEN NOTICE OF SUCH CANCELLATION WILL BE GIVEN TO THE CERTIFICATE HOLDER ABOVE. NOTICE BY REGULAR MAIL SO ADDRESSED SHALL BE SUFFICIENT COMPLIANCE WITH THIS PROVISION. THE NEW YORK STATE INSURANCE FUND DOES NOT ASSUME ANY LIABILITY IN THE EVENT OF FAILURE TO GIVE SUCH NOTICE.

THIS CERTIFICATE DOES NOT APPLY TO THOSE JOB SITES WHICH ARE COVERED BY OTHER INSURANCE AND ARE SPECIFICALLY EXCLUDED BY ENDORSEMENT.

THE POLICY INCLUDES A WAIVER OF SUBROGATION ENDORSEMENT UNDER WHICH NYSIF AGREES TO WAIVE ITS RIGHT OF SUBROGATION TO BRING AN ACTION AGAINST THE CERTIFICATE HOLDER TO RECOVER AMOUNTS WE PAID IN WORKERS' COMPENSATION AND/OR MEDICAL BENEFITS TO OR ON BEHALF OF AN EMPLOYEE OF OUR INSURED IN THE EVENT THAT, PRIOR TO THE DATE OF THE ACCIDENT, THE CERTIFICATE HOLDER HAS ENTERED INTO A WRITTEN CONTRACT WITH OUR INSURED THAT REQUIRES THAT SUCH RIGHT OF SUBROGATION BE WAIVED.

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS NOR INSURANCE COVERAGE UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICY.


DIRECTOR,INSURANCE FUND UNDERWRITING

## STATE OF NEW YORK WORKERS' COMPENSATION BOARD

 CERTIFICATE OF INSURANCE COVERAGE UNDER THE NYS DISABILITY BENEFITS LAWPART 1. To be completed by Disability Benefits Carrier or
1a. Legal Name and Address of Insured (Use street address only)
Gazebo Contracting, Inc.
1c. NYS Unemployment Insurance Employer Registration
3-02 $26^{\text {th }}$ Avenue
Long Island City, NY 11102
1d. Federal Employer Identification Number of Insured or Social Security Number

11-2786038
3a. Name of Insurance Carrier
Hartford Fire Insurance Company
3b. Policy Number of entity listed in box " 1 a ":
DBL603432000

Design \& Construction
30-30 Thomson Avenue
New York, NY 11101
2. Name and Address of the Entity Requesting Proof of

Coverage (Entity Being Listed as Certificate Holder)
4. Policy covers:
a.
b.Only the following class or classes of the employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the
and that the named insured has NYS Disability Benefits insurance coverage as described above.

Date Signed $\qquad$

- icensed Insurance Agent of that insurance carrier)

Signature of insurance carrier s Executive
Telephone Number: $\qquad$ Title $\qquad$
rm is sioned by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that IMPORTANT: If box "4a" is checked and this form is signed by the itly to the certificate holder. 320 , Subd. 8 of the Disability Benefits Law. It must be mailed carrier, this certificate is COMPLEIE. MOT COMPLETE for purposes of Section 320, Subd. 8 , Albany, New York 12207. If box " 4 b " is checked, this certificate is for . To be completed by NYS Workers' Compensation Board (Only if
PART 2. To be completed by NYS Workers' Comper State Of New York

## Workers' Compensation Board

(the NYS Workers' Compensation Board, the above-named employer has complied with the NYS
Disability Benefits Law with respect to all of his/her employees.
By__ (Signature of NYS Workers' Compensation Board Employee)

Date Signed $\qquad$ Title $\qquad$ Telephone Number: $\qquad$ Title Please Note: Only insurance carrier licensed to write NYS disability benefits insurers are NOT authorized to issue this form. those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.

## ACORN

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 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 rights to the certificate holder in lieu of such endorsements).
PRODUCER
USI Insurance Services, LLC
333 Earle Ovington Blvd., Suite
800
Uniondale, NY 11553
insured


REVISION NUMBER:
COVERAGES
CERTIFICATE 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 BECOMES HEREIN IS SUBJECT TO ALL THE TERMS,
CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLCIES BESCAID CLAIMS.
EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN ROUCY EFF POLICY EXP


A Eng Field Office MPA00000027669G
description of operations ILOCATIONS I VEHILLES (ACORD 107, Add ic - Hyla Blvd. Bus Pads for Selective Bus Service - Boroughs of RE: Job \# HWR100PAD, D. The General Liability, Automobile and Pollution policies includes an automatic Brooklyn and Staten is Additional Insured endorser York State, including its officials and employees, Federal Transit officials and employees, New York State, including its of len when there is a written contract that requires Administration, including its officials and employees on behalf of the named insured
such status, and only with regard to work performed on behalf

CERTIFICATE HOLDER
New York City Department of Design \& Construction 30-30 Thomson Avenue Long Island City, NY 11101

## AUTHORIZED REPRESENTATIVE

CANCELLATION
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE SHOULD ANY EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

## ACORD. INSURANCE BINDER

06/10/16



NAME \& ADDRESS

| Gazebo Contracting Inc. <br> 3-02 26th Avenue <br> Long Island City, NY 11102 | MORTGAGEE <br> LOSS PAYEE | X | ADDITIONAL INSURED <br> Designated Contractor |
| :---: | :---: | :---: | :---: |
|  | LOAN \# |  |  |
|  | $\begin{gathered} \text { AUTHORIZED REP } \\ 70 \text { Row } \end{gathered}$ |  |  |

SPECIAL CONDITIONS/OTHER COVERAGES (Cont. from page 1)
Bronx Surface Transit hority (SIRTOA), MTA Capital Construction Co. Transit Operation Transit Operation Authority (MaBSTOA), the Staten Island Rapid affiliates, and the City of New York (as officials and employees, Federal Administration, including its officials and employees

## CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

USI Insurance Services, LLC
[Name of broker or agent (typewritten)]
333 Earle Ovington Blvd., Uniondale, NY 11553
[Address of broker or agent (typewritten)]

Lisa.Marrazzo@usi.com
[Email address of broker or agent (typewritten)]

516-419-4117/610-362-8917
[Phone number/Fax number of broker or agent (typewritten)]

[Signature of authorized official, beaker, or agent]

Lisa Marrazzo, Senior Account Executive
[Name and title of authorized official, broker, or agent (typewritten)]

State of .....New.York $\qquad$ .)
) ss.:
County of ...Nasssau ..)
$\frac{\text { Sworn to before nde this 10th day of June }}{\text { NOTARY PUBLIGFOR THE STATE OF New York }}$

[^6]
## SCHEDUIE OF WORKMEN, MECHANICS AND LABORERS

The following is a list of classifications for workmen, mechanics and laborers which are anticipated to be employed in the performance of work under this contract, followed by a schedule of the prevailing wage rates and supplemental benefits for all classifications as established by the Comptroller of the City of New York.

Request for interpretation or correction under subsection $A$ of section No. 3 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 classification of trades required to be used at the time of the award of 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.

## CLASSIFICATION

CODE

| 15 | 42001 | Rigger |
| :---: | :---: | :---: |
| 15 | 42002 | Sign Erector |
|  |  |  |
| 16 | 11001 | Gardener |
| 16 | 11002 | Tree Pruner |
| 16 | 11003 | Tree Remover |
|  |  | Asphalt Raker (Highway \& Paving) |
| 16 | 11011 | Asphalt (Highway \& Paving) |
| 16 | 11012 | Tamper |
| 16 | 11013 | Curbsetter (Highway \& Paving) |
| 16 | 11014 | Formmerman (Highway \& Paving) |
| 16 | 11015 | Rammerer (Highway \& Paving) |
| 16 | 11016 | maborer (ther TITLES (Highway \& Paving) |
| 16 | 11017 | ALL OHHER |
| 16 | 23001 | Laborer |
| 16 | 23002 | Operatior Operating Engineer |
| 16 | 23003 | Junior Operating Engineer |
| 16 | 23004 | Junior Operating Engineer |
| 16 | 23005 | Junior (Heavy Construction) |
| 16 | 23006 | Oiler (Heavy Construction) |
| 16 | 23007 | Oller (Heavy |
| 16 | 23051 | Surveyor-Heavy Construction |
| 16 | 23052 | Surveyor-Heavy. Construction-Rodman |
| 16 | 23053 | Surveyor-Land Surveying-Party Chief |
| 16 | 23057 | Surveyor-Land Surveying-Instrument Man |
| 16 | 23058 | Surveyor-Land Surveying-Rodman |
| 16 | 23059 | Surveyor |

CODE CLASSIFICATION
$16 \quad 23061$
$16 \quad 23062$$16 \quad 23063$Operating Engineer-Road \& Heavy Construction
Operating Engineer-Paving
Operating Engineer-$16 \quad 23071$$16 \quad 23 \quad 072$
$16 \quad 23073$$16 \quad 23074$
Teamster-Heavy Equipment Trailer Driver Teamster-Dump Truck Driver
Teamster-Flat Bed Trailer Driver (3-Axle)Teamster-Redi-Mix (Sand and Gravel)
$16 \quad 29011$ Drill Runners
1711001 Plumbers
1721001 Painter (Brush \& Roller)
1731001 Electrician
$17 \quad 41001$ Bricklayer
$17 \quad 41002$ Mason Tender1741004.Cement Mason
$17 \quad 42002$ Metallic Lather
$17 \quad 51.001$ Carpenter
Dock Builder
$17 \quad 71001$ Cement \& Concrete Worker
17
91001 Structural Iron Worker
17
95001 Barman
$17 \quad 96021$ Derrickmen \& Riggers
17.99001 Ornamental Iron Worker
Sandblaster
Pointers (Waterproofer) $17 \quad 99005$
Welders $17 \quad 99011$
Each classification may include trainees depending upon project staffing schedules and as required by the terms of this contract.

## LABOR LAW $\$ 220$ PREVAILING WAGE SCHEDULE

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 Labor Law $\S 220$ 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 contracts.

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 New York State 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 works contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public works contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public works 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 works contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-7974. All callers must have the agency name and contract registration number available when calling with questions on public works contracts. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

The appropriate schedule of prevailing wages and benefits must be posted at all public work sites pursuant to Labor Law $\mathbf{§}^{220}$ (3-a) (a).

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site www.comptroller.nyc.gov. 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 www.comptroller.nyc.gov.

The Comptroller's Office has attempted to include all overtime, shift and night differential, Holiday, Saturday, Sunday or other premium time work. However, this schedule does not set forth every prevailing practice with respect to such rates with which employers must comply. All such practices are nevertheless part of the employer's prevailing wage obligation and contained in the collective bargaining agreements of the prevailing wage unions. These collective bargaining agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 6694443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Prevailing rates and ratios for apprentices are attached to this schedule in the Appendix. 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 New York State Department of Labor, may be employed on a public work project. Workers who are not journey persons or not registered apprentices pursuant to Labor Law $\$ 220$ (3-e) may not be substituted for apprentices and must be paid as journey persons.

Public Work construction, reconstruction, demolition, excavation, rehabilitation, repair, renovation, alteration, or improvement contracts 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 Mayor's Office of Contract regular workday. More information is available at the http://www.nyc.gov/html/mocs/html/vendors/pla.shtml. Services (MOCS) web page at

All the provisions of Labor Law section 220 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller; 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 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 benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.

Particular attention should be given to the supplemental benefits requirement. Although in most instances the payment or provision for supplemental benefits is for each hour worked, some classifications require the payment or provision of supplemental benefits for each hour paid. Consequently, some prevailing practices require benefits to be purchased at the overtime, shift differential, Holiday, Saturday, Sunday or other premium time rate.

## Benefits are paid for EACH HOUR WORKED unless otherwise noted.

Wasyl Kinach, P.E. Director of Classifications<br>Bureau of Labor Law

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

## TABLE OF CONTENTS

PAGE
CLASSIFICATION ..... 5
ASBESTOS HANDLER ..... 5
BLASTER ..... 7
BOILERMAKER ..... 8
BRICKLAYER ..... 9
CARPENTER - BUILDING COMMERCIAL ..... 10
CARPENTER - HEAVY CONSTRUCTION WORK ..... 11
CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST
CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST ..... 12
CEMENT \& CONCRETE WORKER ..... 13
CEMENT MASON ..... 13
CORE DRILLER ..... 15
DERRICKPERSON AND RIGGER ..... 15
DIVER ..... 16
DOCKBUILDER - PILE DRIVER ..... 17
DRIVER: TRUCK (TEAMSTER) ..... 19
ELECTRICIAN ..... 22
ELECTRICIAN - ALARM TECHNICIAN ..... 23
ELECTRICIAN-STREET LIGHTING WORKER ..... 24
ELEVATOR CONSTRUCTOR ..... 25
ELEVATOR REPAIR \& MAINTENANCE ..... 26
ENGINEER ..... 31
ENGINEER - CITY SURVEYOR AND CONSULTANT ..... 32
ENGINEER - FIELD (BUILDING CONSTRUCTION) ..... 33
ENGINEER - FIELD (HEAVY CONSTRUCTION) ..... 34
ENGINEER - FIELD (STEEL ERECTION) ..... 35
ENGINEER - OPERATING ..... 43
FLOOR COVERER ..... 44
GLAZIER ..... 45
GLAZIER - REPAIR \& MAINTENANCE ..... 46
HEAT AND FROST INSULATOR ..... 47
HOUSE WRECKER ..... 47
IRON WORKER - ORNAMENTAL ..... 48
IRON WORKER - STRUCTURAL ..... 49
LABORER ..... 50
LANDSCAPING

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

MARBLE MECHANIC ..... 52
MASON TENDER (INTERIOR DEMOLITION WORKER) ..... 53
METALLIC LATHER ..... 54
MILLWRIGHT ..... 55
MOSAIC MECHANIC ..... 56
PAINTER ..... 57
PAINTER - SIGN ..... 58
PAINTER - STRIPER ..... 58
PAINTER - STRUCTURAL STEEL ..... 59
PAPERHANGER ..... 60
PAVER AND ROADBUILDER ..... 61
PLASTERER ..... 62
PLASTERER - TENDER ..... 64
PLUMBER ..... 65
PLUMBER (MECHNICAL EQUIPMENT AND SERVICE) ..... 65
PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION) ..... 67
PLUMBER: PUMP \& TANK. ..... 67
68POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDI.................................................................................................................................
69
SANDBLASTER - STEAMBLASTER ..... 70
SHEET METAL WORKER. ..... 70
SHEET METAL WORKER - SPECIALTY ..... 71
SHIPYARD WORKER ..... 72
SIGN ERECTOR ..... 73
STEAMFITTER ..... 75
STEAMFITTER - REFRIGERATION AND AIR CONDITIONER ..... 75
STONE MASON - SETTER ..... 77
TAPER ..... 79
TELECOMMUNICATION WORKER ..... 80
TILE FINISHER. ..... 81
TILE LAYER - SETTER ..... 82
TIMBERPERSON ..... 83
TUNNEL WORKER ..... 83
WELDER. ..... 84

## ASBESTOS HANDLER <br> (Hazardous Material; Disturbs, removes, encapsulates, repairs, or encloses friable asbestos material)

## Asbestos Handler

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 36.00$
Supplemental Benefit Rate per Hour: \$15.95

## 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 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)

## BLASTER

## Blaster

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$46.89
Supplemental Benefit Rate per Hour: \$41.19

## Blaster (Hydraulic)

Effective Period: 7/1/2015 - 6/30/2016

Wage Rate per Hour: \$47.71
Supplemental Benefit Rate per Hour: $\$ 41.19$

## Blaster - Trac Drill Hydraulic

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$42.25
Supplemental Benefit Rate per Hour: \$41.19

## Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.46
Supplemental Benefit Rate per Hour: \$41.19

## Blaster - Operators of Jack Hammers

Chippers: Spaders: Concrete Breakers: and all other pneumatic tools of like usage: Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers: Hydro (Water) Demolition

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ \mathbf{4 0 . 4 2}$
Supplemental Benefit Rate per Hour: \$41.19

## Blaster - Powder Carriers

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$36.53
Supplemental Benefit Rate per Hour: \$41.19

## Blaster - Hydraulic Trac Drill Chuck Tender

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$35.25
Supplemental Benefit Rate per Hour: $\$ 41.19$

## Blaster - Chuck Tender \& Nipper

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ \mathbf{3 4} .50$
Supplemental Benefit Rate per Hour: \$41.19

## Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$20.68
Supplemental Benefit Rate per Hour: $\$ 41.19$

## Overtime Description

## Magazine Keepers:

Time and one half for work performed in excess of forty (40) hours per week and for work performed on Saturdays, Sundays and Holidays.

## All Other Employees:

Time and one-half for the first eight hours of work on Saturday and for Make-up Time. Double time for all hours over eight Monday through Friday (except make-up hours) and for all hours worked on Sunday and Holidays.

## Overtime

Double time 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
Presidential Election Day
Thanksgiving Day
Christmas Day

## Paid Holidays

None

## Shift Rates

A single shift shall be 8 hours plus an unpaid lunch, starting at 8:00 A.M (or between 6:00 A.M. and 10:00 A.M. on weekdays). When two (2) shifts are employed, each shift shall be 8 hours plus $1 / 2$ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half ( $71 / 2$ ) hours, but will be paid for eight (8) hours, since only one-half ( $1 / 2$ ) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.
(Local \#29)

## BOILERMAKER

## Boilermaker

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$51.56
Supplemental Benefit Rate per Hour: \$41.69
Supplemental Note: For time and one half overtime - $\$ 61.94$ For double overtime $\mathbf{-} \mathbf{\$ 8 2 . 1 8}$

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

## Overtime Description

For Repair and Maintenance work:
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
For New Construction work:
Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day
Quadruple time the regular rate for work on the following holiday(s).
Labor Day

## Paid Holidays

## Good Friday

Day after Thanksgiving
Day before Christmas
Day before New Year's Day

## Shift Rates

When shifts are required, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work seven and one-half ( $71 / 2$ ) hours and receive eight hours at the regular straight time hourly the regular straight time hou.25) per hour. The third shift shall work seven (7) hours and receive eight hours at be considered as time worked. Work in excess of (\$0.50) per hour. A thirty ( 30 ) minute lunch period shall not construction work or repair work overtime wage the above shall be paid overtime at the appropriate new

## (Local \#5)

## BRICKLAYER

## Bricklayer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$48.91

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

§220 PREVAILING WAGE SCHEDULE
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 8 . 0 3}$

## 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.
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
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

## Paid Holidays

None

## Shift Rates

Overtime rates to be paid outside the regular scheduled work day.

## CARPENTER - BUILDING COMMERCIAL

## Building Commercial

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 5 0 . 5 0}$
Supplemental Benefit Rate per Hour: $\$ 45.88$

## 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
Washington's Birthday
Memorial Day

Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays <br> 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.
(Carpenters District Council)

## CARPENTER - HEAVY CONSTRUCTION WORK (Construction of Engineering Structures and Building Foundations)

## Heavy Construction Work

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$50.50
Supplemental Benefit Rate per Hour: \$46.65

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
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)

## CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST

## Carpenter - Hod Hoist

## (Assisted by Mason Tender)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 49.60$
Supplemental Benefit Rate per Hour: $\$ 43.00$

## 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 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.

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

## (Carpenters District Council)

## CEMENT \& CONCRETE WORKER

## Cement \& Concrete Worker

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$42.48
Supplemental Benefit Rate per Hour: \$26.57
Supplemental Note: $\mathbf{\$ 2 9 . 3 2}$ on Saturdays; $\$ 32.07$ on Sundays \& Holidays

## Overtime Description

Time and one half the regular rate after 7 hour day (time and one half the regular rate after an 8 hour day when working with Dockbuilders on pile cap forms and for work below street level to the top of the foundation wall, not to exceed 2 feet or 3 feet above the sidewalk-brick shelf, when working on the foundation and structure.)

## Overtime

Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

## Paid Holidays

1/2 day before Christmas Day
$1 / 2$ day before New Year's Day

## Shift Rates

On shift work extending over a twenty-four hour period, all shifts are paid at straight time.
(Cement Concrete Workers District Council)

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

## CEMENT MASON

## Cement Mason

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$38.88
Supplemental Benefit Rate per Hour: \$39.80
Supplemental Note: For time and one half overtime - \$49.05; For double overtime - \$58.30

## Overtime Description

Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and onehalf the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on 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

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 an off shift day, (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. Four Days a week at Ten (10)hour day.
(Local \#780)

## CORE DRILLER

## Core Driller

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$36.82
Supplemental Benefit Rate per Hour: \$22.69

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE 

## Core Driller Helper

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$29.44
Supplemental Benefit Rate per Hour: \$22.69

## Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 2 6 . 5 0}$
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 2 . 6 9}$

## Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.55
Supplemental Benefit Rate per Hour: \$22.69

## Core Driller Helper (First year in the industry)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 2 0 . 6 1}$
Supplemental Benefit Rate per Hour: \$22.69

## Overtime Description

Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on the following holiday(s).

## Paid Holidays

New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

## Shift Rates

The shift day shall be the continuous eight and one-half ( $81 / 2$ ) hours from 6:00 A.M. to 2:30 P.M. and from 2:30 P.M. to 11:00 P.M., including one-half ( $1 / 2$ ) hour of employees regular rate of pay for lunch. 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 seventy-five cents ( $\$ 0.75$ ) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half ( $71 / 2$ ) hours paid for eight ( 8 ) hours of labor and be permitted one-half ( $1 / 2$ ) hour for mealtime.

## DERRICKPERSON AND RIGGER

## Derrick Person \& Rigger

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.84
Supplemental Benefit Rate per Hour: \$49.28
Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. $\$ 50.70$ - For work performed in Staten Island.

## 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. Deduct $\$ 1.42$ from the Staten Island hourly benefits rate before computing overtime.

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ \mathbf{6 3 . 8 2}$

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$46.65

## Diver Tender (Marine)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.47
Supplemental Benefit Rate per Hour: \$46.65

## Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday. Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

## Paid Holidays <br> None

## Shift Rates

When three shifts are utilized each shift shall work seven and one half-hours (71/2 hours) and paid for 8 hours,
allowing for one half hour for lunch.

## (Carpenters District Council)

## DOCKBUILDER - PILE DRIVER

## Dockbuilder - Pile Driver

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 5 0 . 5 0}$
Supplemental Benefit Rate per Hour: $\$ 46.65$

## Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday. Saturday may be used as a make-up day 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 <br> 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$39.53
Supplemental Benefit Rate per Hour: \$41.59
Supplemental Note: Over 40 hours worked: time and one half rate $\$ 16.94$, double time rate $\$ 22.58$

## Driver - Tractor Trailer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$39.50
Supplemental Benefit Rate per Hour: $\$ 43.35$
Supplemental Note: For over 40 hours worked: at time and one half $-\$ 16.65$; at double time $-\$ 22.20$

## Driver - Euclid \& Turnapull Operator

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.06

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK 

 §220 PREVAILING WAGE SCHEDULESupplemental Benefit Rate per Hour: \$43.35

## Supplemental Note: Over 40 hours worked

## 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 $51 / 3$

## 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
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Shift Rates

Off single shift work commencing between 6:00 P.M. and 5:00 A.M. shall work eight and one half hours allowing

## Driver Redi-Mix (Sand \& Gravel)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 36.30$
Supplemental Benefit Rate per Hour: $\$ 40.02$
Supplemental Note: Over 40 hours worked: time and one half rate $\$ 13.90$, double time rate $\$ 18.53$

## Overtime Description

For Paid Holidays: Employees working two (2) days in the calendar week in which the holiday falls are to paid for these holidays, provided they shape each remaining workday during that calendar 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).
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
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Christmas Day
(Local \#282)

## ELECTRICIAN <br> (Including all low voltage cabling carrying data; video; and voice in combination with data and or video.)

## Electrician "A" (Regular Day)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 54.00$
Supplemental Benefit Rate per Hour: $\$ \mathbf{5 0 . 0 3}$

## Electrician "A" (Regular Day Overtime)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 8 1 . 0 0}$
Supplemental Benefit Rate per Hour: \$53.41

## Electrician "A" (Day Shift)

Effective Period: 7/1/2015 - 6/30/2016
Wage Rate per Hour: \$54.00
Supplemental Benefit Rate per Hour: $\$ 50.03$

## Electrician "A" (Day Shift Overtime After 8 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$81.00
Supplemental Benefit Rate per Hour: \$53.41

## Electrician "A" (Swing Shift)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$63.36
Supplemental Benefit Rate per Hour: $\mathbf{\$ 5 6 . 9 4}$

## Electrician "A" (Swing Shift Overtime After 7.5 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 9 5 . 0 4}$
Supplemental Benefit Rate per Hour: $\mathbf{\$ 6 0 . 9 1}$

## Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$70.97
Supplemental Benefit Rate per Hour: \$62.78

## Electrician "A" (Graveyard Shift Overtime After 7 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$106.46
Supplemental Benefit Rate per Hour: \$67.23

## 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.

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

## 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

When so elected by the Employer, one or more shifts of at least five days duration may be scheduled as follows: Day Shift: 8:00 am to 4:30 pm, Swing Shift 4:30 pm to 12:30 am, Graveyard Shift: 12:30 am to 8:00 am.

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 $\$ 24.39$.

## Electrician "M" (First 8 hours)

" $M$ " rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.50
Supplemental Benefit Rate per Hour: \$20.82
First and Second Year "M" Wage Rate Per Hour: \$23.00
First and Second Year "M" Supplemental Rate: \$18.56

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.25
Supplemental Benefit Rate per Hour: \$22.54
First and Second Year "M" Wage Rate Per Hour: \$34.50

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE 

First and Second Year "M" Supplemental Rate: \$20.00

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

## Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays

None

## 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: 7/1/2015-3/9/2016
Wage Rate per Hour: \$31.40
Supplemental Benefit Rate per Hour: \$14.76
Supplemental Note: $\$ 13.26$ only after 8 hours worked in a day
Effective Period: 3/10/2016 - 6/30/2016
Wage Rate per Hour: \$32.00
Supplemental Benefit Rate per Hour: \$15.47
Supplemental Note: $\$ 13.97$ 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.
Double time the regular rate for Sunday.

## Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Shift Rates

Night Differential is based upon a ten percent (10\%) differential between the hours of 4:00 P.M. and 12:30 A.M. and a fifteen percent (15\%) differential for the hours 12:00 A.M. to 8:00 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$54.00
Supplemental Benefit Rate per Hour: \$51.86

## Electrician - Electro Pole Foundation Installer

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

 §220 PREVAILING WAGE SCHEDULEEffective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.93
Supplemental Benefit Rate per Hour: $\$ 39.46$

## Electrician - Electro Pole Maintainer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ \mathbf{3 5 . 0 5}$
Supplemental Benefit Rate per Hour: \$35.51

## 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. days worked per week.
Electrician - Electro Pole Foundation Installer: Time and one half the regular rate after 8 hours within a 24 hour period and Saturday and Sunday.
Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

## Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays

None
(Local \#3)

## ELEVATOR CONSTRUCTOR

## Elevator Constructor

Effective Period: 7/1/2015-3/16/2016
Wage Rate per Hour: \$59.55
Supplemental Benefit Rate per Hour: \$31.07

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 PREVAILING WAGE SCHEDULE
Effective Period: 3/17/2016-6/30/2016
Wage Rate per Hour: $\$ 60.96$
Supplemental Benefit Rate per Hour: \$32.67

## Overtime Description

For New Construction: work performed after 7 or 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: 7/1/2015-3/16/2016
Wage Rate per Hour: \$46.92
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 0 . 9 1}$
Effective Period: 3/17/2016-6/30/2016
Wage Rate per Hour: \$47.91
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 2 . 5 1}$

## Overtime Description

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$64.31
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: $\mathbf{\$ 1 0 2 . 9 0}$

## Engineer - Heavy Construction Operating Engineer II

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

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 ( $37,000 \mathrm{lbs}$. and under), 2 man auger.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$62.40
Supplemental Benefit Rate per Hour: $\$ 34.25$
Supplemental Note: \$61.60 on overtime
Shift Wage Rate: \$99.84

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$59.20
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: \$61.60 on overtime
Shift Wage Rate: \$94.72

## Engineer - Heavy Construction Maintenance Engineer I

Installing, Repairing, Maintaining, Dismantling and Manning of all equipment including Steel Cutting, Bending and Heat Sealing Machines, Mechanical Heaters, Grout Pumps, Bentonite Pumps \& Plants, Screening Machines, Fusion Coupling Machines, Tunnel Boring Machines Moles and Machines of a similar nature, Power Packs, Mechanical Hydraulic Jacks; all drill rigs including but not limited to Churn, Rotary Caisson, Raised Bore \& Drills of a similar nature; Personnel, Inspection \& Safety Boats or any boats used to perform functions of same, Mine Hoists, Whirlies, all Climbing Cranes, all Tower Cranes, including but not limited to Truck Mounted and Crawler Type and machines of similar nature; Maintaining Hydraulic Drills and machines of a similar nature; Well Point System-Installation and dismantling; Burning, Welding, all Pumps regardless of size and/or motor power, except River Cofferdam Pumps and Wells Point Pumps; Motorized Buggies (three or more); equipment used in the cleaning and televising of sewers, but not limited to jet-rodder/vacuum truck, vacall/vactor, closed circuit television inspection equipment; high powered water pumps, jet pumps; screed machines and concrete finishing machines of a similar nature; vermeers.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$62.11
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: \$61.60 on overtime
Shift Wage Rate: $\$ 99.38$
Engineer - Heavy Construction Maintenance Engineer II

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK 

 §220 PREVAILING WAGE SCHEDULEOn Base Mounted Tower Cranes
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$81.54
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 4 . 2 5}$
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: $\mathbf{\$ 1 3 0 . 4 6}$

## Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.04
Supplemental Benefit Rate per Hour: $\$ 34.25$
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: \$65.66

## Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$42.11
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: \$67.38

## Engineer - Heavy Construction Oilers I

Gradalls, Cold Planer Grader, Concrete Pumps, Driving Truck Cranes, Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$56.02
Supplemental Benefit Rate per Hour: $\$ 34.25$
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: $\mathbf{\$ 8 9 . 6 3}$

## Engineer - Heavy Construction Oilers II

All gasoline, electric, diesel or air operated Shovels, Draglines, Backhoes, Keystones, Pavers, Gunite Machines, Battery of Compressors, Crawler Cranes, two-person Trenching Machines.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 3 8 . 7 9}$
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: \$61.60 on overtime
Shift Wage Rate: \$62.06

## Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$59.77
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: \$95.63

## Engineer - Steel Erection Oiler I

On a Truck Crane
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$55.95
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: \$89.52

## Engineer - Steel Erection Oiler II

## On a Crawier Crane

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$42.64
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\$ 61.60$ on overtime
Shift Wage Rate: \$68.22

## Overtime Description

On jobs of more than one shift, if the next shift employee fails to report for work through any cause over which the employer has no control, the employee on duty who works the next shift continues to work at the single time rate.

## Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

## Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE 

Thanksgiving Day
Day after Thanksgiving
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$56.88
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 4 . 2 5}$
Supplemental Note: \$61.60 on overtime

## Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.22
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: \$61.60 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 $\mathbf{7 0 , 0 0 0} \mathrm{GVW}$, and machines of a similar nature.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 54.08$
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\$ 61.60$ on overtime

## Engineer - Building Work Oilers II

Oilers on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors (three or more in
Battery).
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.21
Supplemental Benefit Rate per Hour: \$34.25
Supplemental Note: $\mathbf{\$ 6 1 . 6 0}$ on overtime

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

§220 PREVAILING WAGE SCHEDULE

## 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
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

## Shift Rates

Off Shift: double time the regular hourly rate.
(Local \#15)

## ENGINEER - CITY SURVEYOR AND CONSULTANT

## Party Chief

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$37.04
Supplemental Benefit Rate per Hour: \$18.60
Supplemental Note: Overtime Benefit Rate - \$25.45 per hour (time \& one half) $\mathbf{\$ 3 2 . 3 0}$ per hour (double time).

## Instrument Person

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$30.59
Supplemental Benefit Rate per Hour: $\$ 18.60$
Supplemental Note: Overtime Benefit Rate - $\$ 25.45$ per hour (time \& one half) $\$ 32.30$ per hour (double time).

## Rodperson

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 2 6 . 5 2}$
Supplemental Benefit Rate per Hour: \$18.60
Supplemental Note: Overtime Benefit Rate - $\$ 25.45$ per hour (time $\&$ one half) $\$ 32.30$ 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) <br> (Construction of Building Projects, Concrete Superstructures, etc.)

## Field Engineer - BC Party Chief

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 60.77$
Supplemental Benefit Rate per Hour: \$32.40
Supplemental Note: Overtime Benefit Rate $\mathbf{-} \mathbf{\$ 4 5 . 2 8}$ per hour (time \& one half) $\$ 58.15$ per hour (double time).

## Field Engineer - BC Instrument Person

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$47.20
Supplemental Benefit Rate per Hour: \$32.40
Supplemental Note: Overtime Benefit Rate $\mathbf{~} \$ 45.28$ per hour (time \& one half) $\$ 58.15$ per hour (double time).

## Field Engineer - BC Rodperson

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$30.49
Supplemental Benefit Rate per Hour: $\$ 32.40$
Supplemental Note: Overtime Benefit Rate - $\$ 45.28$ per hour (time $\&$ one half) $\$ 58.15$ 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$66.43
Supplemental Benefit Rate per Hour: \$32.40
Supplemental Note: Overtime benefit rate - $\$ 45.28$ per hour (time $\&$ one half), $\$ 58.15$ per hour (double time).

## Field Engineer - HC Instrument Person

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$48.82
Supplémental Benefit Rate per Hour: \$32.40
Supplemental Note: Overtime benefit rate - $\$ 45.28$ per hour (time $\&$ one half), $\$ 58.15$ per hour (double time).

## Field Engineer - HC Rodperson

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.99
Supplemental Benefit Rate per Hour: \$32.40
Supplemental Note: Overtime benefit rate - $\$ 45.28$ per hour (time \& one half), $\$ 58.15$ 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
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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$62.26
Supplemental Benefit Rate per Hour: \$32.40
Supplemental Note: Overtime benefit rate - $\$ 45.28$ per hour (time $\&$ one half), $\$ 58.15$ per hour (double time).

## Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$48.57
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 2 . 4 0}$
Supplemental Note: Overtime benefit rate - $\$ 45.28$ per hour (time $\&$ one half), $\$ 58.15$ per hour (double time).

## Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2015-6/30/2016

Wage Rate per Hour: \$32.61
Supplemental Benefit Rate per Hour: $\$ 32.40$
Supplemental Note: Overtime benefit rate - $\$ 45.28$ per hour (time $\&$ one half), $\$ 58.15$ per hour (double time).

## Overtime Description

Time and one half the regular rate for Saturday for the first eight hours worked.
Double time the regular rate for Saturday for work performed in excess of eight hours.

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$71.75
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: $\mathbf{\$ 1 1 4 . 8 0}$

## Operating Engineer - Road \& Heavy Construction II

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

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$74.29

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$118.86

## Operating Engineer - Road \& Heavy Construction III

Mine Hoists, Cranes, etc. (Used as Mine Hoists)
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$76.67
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$122.67

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$74.84
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$119.74

## Operating Engineer - Road \& Heavy Construction V

Pile Drivers \& Rigs (employing Dock Builder foreperson): Derrick Boats, Tunnel Shovels.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$73.36
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$117.38

## Operating Engineer - Road \& Heavy Construction VI

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

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$69.69
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: $\$ 111.50$

## Operating Engineer - Road \& Heavy Construction VII

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

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 5 6 . 2 5}$
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: $\$ 90.00$

## Operating Engineer - Road \& Heavy Construction VIII

Utility Compressors
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$43.63
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 0 . 4 0}$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$55.03

## Operating Engineer - Road \& Heavy Construction IX

Horizontal Boring Rig
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 6 6 . 2 6}$
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$106.02

## Operating Engineer - Road \& Heavy Construction X

Elevators (manually operated as personnel hoist).
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 6 0 . 8 9}$
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$97.42

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$47.28
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: $\mathbf{\$ 7 5 . 6 5}$

## Operating Engineer - Road \& Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$70.42
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$112.67

## Operating Engineer - Road \& Heavy Construction XIII

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$68.19
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$109.10

## Operating Engineer - Road \& Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$65.20
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\mathbf{\$ 5 5 . 1 0}$ overtime hours
Shift Wage Rate: $\$ 104.32$

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$43.91
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$70.26

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$62.25
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: $\$ 99.60$

## Operating Engineer - Road \& Heavy Construction XVII

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 62.74$
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 0 . 4 0}$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$100.38

## Operating Engineer - Road \& Heavy Construction XVIII

Tower Crane
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$90.09
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$144.14

## Operating Engineer - Paving I

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$69.69
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: \$55.10 overtime hours
Shift Wage Rate: $\$ 111.50$

## Operating Engineer - Paving II

Asphalt Roller
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$67.87
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$108.59

## Operating Engineer - Paving III

Asphalt Plants
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$57.40
Supplemental Benefit Rate per Hour: $\$ \mathbf{3 0 . 4 0}$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: $\mathbf{\$ 9 1 . 8 4}$

## Operating Engineer - Concrete I

Cranes
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$74.51
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Concrete II

## Compressors

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 44.25$
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Concrete III

Micro-traps (Negative Air Machines), Vac-All Remediation System.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$59.51
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 0 . 4 0}$
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Steel Erection I

Three Drum Derricks
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$77.40
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$123.84

## Operating Engineer - Steel Erection II

Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$74.37
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$118.99

## Operating Engineer - Steel Erection III

Compressors, Welding Machines.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.09
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$70.54

## Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.98
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Shift Wage Rate: \$67.17

## Operating Engineer - Building Work I

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

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$61.27
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.85
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Building Work III

Double Drum
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$69.76
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours
Operating Engineer - Building Work IV

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE 

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$73.91
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$68.09
Supplemental Benefit Rate per Hour: \$30.40
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$67.37
Supplemental Benefit Rate per Hour: $\$ 30.40$
Supplemental Note: $\$ 55.10$ overtime hours

## Operating Engineer - Building Work VII

Rack \& Pinion and House Cars
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$53.54
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 0 . 4 0}$
Supplemental Note: $\$ 55.10$ overtime hours
For New House Car projects Wage Rate per Hour \$42.70

## 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 <br> New Year's Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 PREVAILING WAGE SCHEDULE
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

## Shift Rates

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: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 5 0 . 5 0}$
Supplemental Benefit Rate per Hour: \$45.88

## 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.

```
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
```


## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

 §220 PREVAILING WAGE SCHEDULE
## Paid Holidays

$1 / 2$ day on Christmas Eve if work is performed in the A.M.
$1 / 2$ day on New Year's Eve if work is performed in the A.M.

## Shift Rates

Two shifts may be utilized with the first shift working 8:00 A.M. to the end of the shift at the straight time of pay. The second shift will receive one hour at double time rate for the last hour of the shift. (eight for seven, nine for eight).
(Carpenters District Council)

## GLAZIER

(New Construction, Remodeling, and Alteration)

## Glazier

Effective Period: 7/1/2015-10/31/2015
Wage Rate per Hour: \$43.35
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 6 . 5 9}$
Supplemental Note: Supplemental Benefit Overtime Rate: \$45.34
Effective Period: 11/1/2015-6/30/2016
Wage Rate per Hour: \$43.95
Supplemental Benefit Rate per Hour: \$36.84
Supplemental Note: Supplemental Benefit Overtime Rate: $\$ 45.59$

## Overtime Description

An optional 8th hour can be worked at straight time rate. If 9th hour is worked, then both hours or more (8th \& 9 th or more) will be at the double time rate of pay.

## Overtime

Double time the regular rate after a 7 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
Thanksgiving Day
Day after Thanksgiving

Christmas Day

## Paid Holidays <br> None

Shift Rates
Shifts shall be any 7 hours beyond 4:00 P.M. for which the glazier shall receive 8 hours pay for 7 hours worked.

## GLAZIER - REPAIR \& MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under $\$ 105,000$. Except where enumerated (i.e. plate glass windows) does not apply to non-residential buildings.)

## Craft Jurisdiction for repair, maintenance and fabrication

Plate glass replacement, Residential glass replacement, Residential mirrors and shower doors, Storm windows and storm doors, Residential replacement windows, Herculite door repairs, Door closer repairs, Retrofit apartment house (non commercial buildings), Glass tinting.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.68
Supplemental Benefit Rate per Hour: \$19.54

## Overtime

Time and one half the regular rate after an 8 hour day.
Double time the regular rate for Sunday.
Time and one half the regular hourly rate after 40 hours in any work week.

## Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day
(Local \#1281)

## HEAT AND FROST INSULATOR

## Heat \& Frost Insulator

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 57.38$
Supplemental Benefit Rate per Hour: \$37.41

## Overtime Description

Double time shall be paid for supplemental benefits during overtime work. 8th hour paid at time and one half.

## 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
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 <br> 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. Off hour work in occupied or retail buildings may be worked on weekdays with and increment of $\$ 1.00$ per hour and eight hours pay for seven (7) hours worked. Double time will apply for over seven (7) hours worked on
weekdays, weekends or holidays.

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$35.52
Supplemental Benefit Rate per Hour: \$26.86

## House Wrecker - Tier B

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$24.90
Supplemental Benefit Rate per Hour: $\$ 19.88$

## 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.

## 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: 7/1/2015-6/30/2016

## Wage Rate per Hour: \$43.20

Supplemental Benefit Rate per Hour: \$47.67
Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

## Overtime Description

Time and one half the regular rate after a 7 hour day for a maximum of two hours on any regular work day (the 8th and 9th hour) and double time shall be paid for all work on a regular work day thereafter, time and one half the regular rate for Saturday for the first seven hours of work and double time shall be paid for all work on a Saturday thereafter.

## Overtime

Double time the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

## Paid Holidays

None

## Shift Rates

For off shift work - 8 hours pay for 7 hours of work. When two or three shifts are employed on a job, Monday through Friday, the workday for each shift shall be seven hours and paid for ten and one-half hours at the single time rate. When two or three shifts are worked on Saturday, Sunday or holidays, each shift shall be seven hours and paid fifteen and three-quarters hours.
(Local \#580)

## IRON WORKER - STRUCTURAL

## Iron Worker - Structural

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$48.75
Supplemental Benefit Rate per Hour: $\$ 67.34$
Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

## 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.

## 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
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.
$1 / 2$ 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 onehalf, 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.
(Local \#40 \& \#361)

## LABORER <br> (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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.50

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK 

§220 PREVAILING WAGE SCHEDULE
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 6 . 5 3}$

## 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
Presidential Election 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 ( $71 / 2$ ), but shall be paid for eight ( 8 ) hours of labor, and be permitted one half hour for lunch.
(Local \#731)

## LANDSCAPING

(Landscaping tasks, as well as tree pruning, tree removing, spraying and maintenance in connection with the planting of street trees and the planting of trees in city parks but not when such activities are performed as part of, or in connection with, other construction or reconstruction projects.)

## Landscaper (Above 6 years experience)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.00
Supplemental Benefit Rate per Hour: \$14.55

## Landscaper ( $3-6$ years experience)

Effective Period: 7/1/2015-6/30/2016

Wage Rate per Hour: $\$ \mathbf{2 6 . 0 0}$
Supplemental Benefit Rate per Hour: \$14.55

## Landscaper (up to 3 years experience)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.50
Supplemental Benefit Rate per Hour: \$14.55

## Groundperson

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.50
Supplemental Benefit Rate per Hour: \$14.55

## Tree Remover / Pruner

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 32.00$
Supplemental Benefit Rate per Hour: \$14.55

## Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$22.00
Supplemental Benefit Rate per Hour: \$14.55

## Watering - Plant Maintainer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$17.00
Supplemental Benefit Rate per Hour: \$14.55

## 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

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Christmas Day

## Shift Rates

Work performed on a 4 pm 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: 7/1/2015-12/31/2015
Wage Rate per Hour: $\$ 51.53$
Supplemental Benefit Rate per Hour: \$35.73
Effective Period: 1/1/2016-6/30/2016
Wage Rate per Hour: \$51.89
Supplemental Benefit Rate per Hour: \$36.62

## Marble Finisher

Effective Period: 7/1/2015-12/31/2015
Wage Rate per Hour: $\$ 40.53$
Supplemental Benefit Rate per Hour: \$34.52
Effective Period: 1/1/2016-6/30/2016
Wage Rate per Hour: $\$ \mathbf{4 0 . 8 0}$
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 5 . 1 5}$

## Marble Polisher

Effective Period: 7/1/2015-12/31/2015
Wage Rate per Hour: \$36.65
Supplemental Benefit Rate per Hour: \$26.63
Effective Period: 1/1/2016-6/30/2016
Wage Rate per Hour: \$37.02
Supplemental Benefit Rate per Hour: \$27.01

## Overtime Description

Supplemental Benefit contributions are to be made at the applicable overtime rates. Time and one half the regular rate after a 7 hour day or time and one half the regular rate after an 8 hour day - chosen by Employer at the start of the project and then would last for the full duration of the project.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 PREVAILING WAGE SCHEDULE

## 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
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays

None
(Local \#7)

## MASON TENDER

## Mason Tender

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$36.67
Supplemental Benefit Rate per Hour: \$28.02

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK 

 §220 PREVAILING WAGE SCHEDULE
## 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.
(Local \#79)

# MASON TENDER (INTERIOR DEMOLITION WORKER) (The erection, building, moving, servicing and dismantling of enclosures, scaffolding, barricades, protection and site safety structures etc., on Interior Demolition jobs.) 

## Mason Tender Tier A

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 35.46$
Supplemental Benefit Rate per Hour: \$22.13

## Mason Tender Tier B

On Interior Demolition job sites $331 / 3 \%$ of the employees shall be classified as Tier A Interior Demolition Workers and $662 / 3 \%$ shall be classified as Tier B Interior Demolition Workers; provided that the employer may employ more than $331 / 3 \%$ Tier A Interior Demolition Workers on the job site. Where the number of employees on a job site is not divisible by 3, the first additional employee (above the number of employees divisible by three) shall be a Tier B Interior Demolition Worker, and the second additional employee shall be a Tier A Interior Demolition Worker.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 24.65$
Supplemental Benefit Rate per Hour: \$16.45

## 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
(Local \#79)

## METALLIC LATHER

## Metallic Lather

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$43.63
Supplemental Benefit Rate per Hour: \$41.57
Supplemental Note: Supplemental benefits for overtime are paid at the appropriate overtime rate.

## Overtime Description

Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

## 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
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election 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

There shall be either two (2) or three (3) shifts, each shift shall be eight (8) hours with nine (9) hours pay, including one half ( $1 / 2$ ) hour for lunch. Off-Hour Start shall commence after 3:30 P.M. and shall conclude by 6:00

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

A.M. The first consecutive seven (7) hours shall be at straight time with a differential of twelve dollars (\$12.00) per hour. Fringes shall be paid at the straight time rate.

## MILLWRIGHT

## Millwright

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 49.50$
Supplemental Benefit Rate per Hour: \$52.01

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
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
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

The first shift shall receive the straight time rate of pay. The second shift receives the straight time rate of pay plus fifteen ( $15 \%$ ) per cent. Members of the second shift shall be allowed one half hour to eat, with this time being included in the hours of the workday established. There must be a first shift to work a second shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen ( $15 \%$ ) per cent for weekday
hours.
(Local \#740)

## MOSAIC MECHANIC

## Mosaic Mechanic - Mosaic \& Terrazzo Mechanic

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.91
Supplemental Benefit Rate per Hour: \$38.15
Supplemental Note: Supplemental benefits for overtime to be paid at the rate of $\$ 48.92$ per hour.

## Mosaic Mechanic - Mosaic \& Terrazzo Finisher

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 44.30$
Supplemental Benefit Rate per Hour: \$38.14
Supplemental Note: Supplemental benefits for overtime to be paid at the rate of $\$ 48.91$ per hour.

## Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.30
Supplemental Benefit Rate per Hour: $\$ 38.14$
Supplemental Note: Supplemental benefits for overtime to be paid at the rate of $\$ 48.91$ per hour.

## Overtime

Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays

None
(Local \#7)

## PAINTER

## Painter - Brush \& Roller

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.00
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 6 . 3 7}$
Supplemental Note: $\$ 31.00$ on overtime

## Spray \& Scaffold / Decorative / Sandblast

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.00
Supplemental Benefit Rate per Hour: \$26.37
Supplemental Note: \$31.00 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 - SIGN

## Designer

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.30
Supplemental Benefit Rate per Hour: $\mathbf{\$ 7 . 2 2}$

## Journeyperson

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$37.48
Supplemental Benefit Rate per Hour: $\mathbf{\$ 7 . 2 2}$

## 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.
Double time the regular rate for work on the following holiday(s).

## Paid Holidays

New Year's Day
Martin Luther King Jr. Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day
Two (2) additional holidays as floating holidays
(Local \#8A-28A)

## PAINTER - STRIPER

## Striper (paint)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 35.00$
Supplemental Benefit Rate per Hour: \$12.27
Supplemental Note: Overtime Supplemental Benefit rate - \$8.02 New Hire Rate (0-3 months) - \$0.00

## Lineperson (thermoplastic)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 39.00$
Supplemental Benefit Rate per Hour: \$12.27
Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

§220 PREVAILING WAGE SCHEDULE

## 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
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Shift Rates

Employees hired before April 1, 2003: 15\% night shift premium differential for work commenced at 9:00 PM or later.

## Vacation

Employees with one to two years service shall accrue vacation based on hours worked: $\mathbf{2 5 0}$ 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 $\mathbf{2 5}$ or more years service receive five weeks vacation. Vacation must be taken during winter months. 2 Personal Days except employees hired after 4/1/12 who do not have 2 years of service.
(Local \#917)

## PAINTER - STRUCTURAL STEEL

## Painters on Structural Steel

Effective Period: 7/1/2015-9/30/2015
Wage Rate per Hour: \$48.00
Supplemental Benefit Rate per Hour: \$34.58
Effective Period: 10/1/2015-6/30/2016
Wage Rate per Hour: \$49.00
Supplemental Benefit Rate per Hour: \$36.08
Painter - Power Tool

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-9/30/2015
Wage Rate per Hour: $\$ \mathbf{5 4 . 0 0}$
Supplemental Benefit Rate per Hour: \$34.58
Effective Period: 10/1/2015-6/30/2016
Wage Rate per Hour: $\$ 55.00$
Supplemental Benefit Rate per Hour: \$36.08

## Overtime Description

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

## Overtime

Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day
Paid Holidays
None
Shift Rates
Regular hourly rates plus a ten per cent (10\%) differential
(Local \#806)

## PAPERHANGER

## Paperhanger

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.08
Supplemental Benefit Rate per Hour: \$29.23
Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

## Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

## Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

## Paid Holidays

None

## Shift Rates

Evening shift - 4:30 P.M. to 12:00 Midnight (regular rate of pay); any work performed before 7:00 A.M. shall be at time and one half the regular base rate of pay.
(District Council of Painters \#9)

## PAVER AND ROADBUILDER

## Paver \& Roadbuilder - Formsetter

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.85
Supplemental Benefit Rate per Hour: $\$ 36.92$

## 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 before the installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry seal coating, maintenance of safety surfaces; play equipment installation, and other related work.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.98
Supplemental Benefit Rate per Hour: $\$ \mathbf{3 6 . 9 2}$

## Production Paver \& Roadbuilder - Screed Person

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

(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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.45
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 6 . 9 2}$

## Production Paver \& Roadbuilder - Raker

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$44.85
Supplemental Benefit Rate per Hour: \$36.92

## Production Paver \& Roadbuilder - Shoveler

General laborer (except removal of surfaces - see Paver and Roadbuilder-Laborer) including but not limited to tamper, AC paint and liquid tar work.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.56
Supplemental Benefit Rate per Hour: $\$ 36.92$

## Overtime Description

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus $\mathbf{2 5 \%}$.
Employees who work on a holiday listed below receive the straight time rate plus one day's pay 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.

## Paid Holidays

Memorial Day Independence Day
Labor Day
Presidential Election 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 ( $71 / 2$ ) hours but will be paid for eight (8) hours 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 $15 \%$ over the single time rate for the screed person, rakers and

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

shovelers directly involved only. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.
(Local \#1010)

## PLASTERER

## Plasterer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$43.43
Supplemental Benefit Rate per Hour: $\$ 27.95$

## 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.
Saturday may be used as a
weather.

Double time 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
Presidential Election Day
Thanksgiving Day
Christmas Day

## Paid Holidays <br> None

## Shift Rates

When it is not possible to conduct alteration work during regular work hours, in a building occupied by tenants, said work shall proceed on a shift basis: however work over seven (7) hours in any twenty four (24) hour period, the time after seven (7) hours shall be considered overtime.
The second shift shall start at a time between 3:30 p.m. and 7:00 p.m. and shall consist of seven (7) working hours and shall receive eight (8) hours of wages and benefits at the straight time rate. The workers on the work.

## PLASTERER - TENDER

## Plasterer - Tender

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$36.67
Supplemental Benefit Rate per Hour: \$28.02

## 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: 7/1/2015-6/30/2016

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE 

Wage Rate per Hour: $\$ 65.27$
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 8 . 3 8}$
Supplemental Note: Overtime supplemental benefit rate per hour: $\$ 56.48$

## 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$52.24
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 2 . 2 8}$

## Overtime Description

Double time the regular rate after a 7 hour day - unless for new construction site work where the plumbing contract price is $\$ 1.5$ million or less, the hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical trades at the site are working an eighth hour at straight time, then the plumber shall also work an eighth hour at straight time.

## 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

## Shift Rates

Shift work, when directly specified in public agency or authority documents where plumbing contract is $\$ 8$ million or less, will be permitted. $30 \%$ shift premium shall be paid for wages and fringe benefits for $4: 00 \mathrm{pm}$ 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)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

# PLUMBER (MECHNICAL EQUIPMENT AND SERVICE) (Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.) 

## Plumber

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$39.27
Supplemental Benefit Rate per Hour: \$13.34

## 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
(Plumbers Local \# 1)

## PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.19
Supplemental Benefit Rate per Hour: \$20.62

## Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

## Overtime Holidays

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

 §220 PREVAILING WAGE SCHEDULEDouble 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 <br> None

## Shift Rates

$30 \%$ shift premium shall be paid for wages and fringe benefits for $4: 00 \mathrm{pm}$ 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$62.83
Supplemental Benefit Rate per Hour: \$21.37

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

## Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day

Day after Thanksgiving
Christmas Day

## Paid Holidays

None

## Shift Rates

All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

## POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)

## Pointer - Waterproofer, Caulker Mechanic

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$47.41
Supplemental Benefit Rate per Hour: \$24.40

## 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 4:30 P.M.) is to be paid at time and one half the regular rate.

## ROOFER

## Roofer

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.70
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 0 . 1 7}$

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.

## Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Presidential Election 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.
(Local \#8)

## SANDBLASTER - STEAMBLASTER (Exterior Building Renovation)

## Sandblaster / Steamblaster

Effective Period: 7/1/2015-6/30/2016

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$47.41
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 4 . 4 0}$

## 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 4:30 P.M.) is to be paid at time and one half the regular rate.
(Bricklayer District Council)

## SHEET METAL WORKER

## Sheet Metal Worker

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 46.96$
Supplemental Benefit Rate per Hour: \$45.19
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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$37.57

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

 §220 PREVAILING WAGE SCHEDULESupplemental Benefit Rate per Hour: \$45.19

## Sheet Metal Worker - Duct Cleaner

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$12.90
Supplemental Benefit Rate per Hour: \$8.07

## Overtime

Time and one half the regular rate after a 7 hour day.
Time and one haff 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 (seven 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

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$42.64
Supplemental Benefit Rate per Hour: \$23.62
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

## Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Paid Holidays
None
(Local \#28)

## SHIPYARD WORKER

## Shipyard Mechanic - First Class

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.54
Supplemental Benefit Rate per Hour: \$3.01

## Shipyard Mechanic - Second Class

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 2 0 . 2 2}$
Supplemental Benefit Rate per Hour: \$2.73

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

§220 PREVAILING WAGE SCHEDULE

## Shipyard Laborer - First Class

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 2 0 . 9 0}$
Supplemental Benefit Rate per Hour: \$2.75

## Shipyard Laborer - Second Class

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$13.86
Supplemental Benefit Rate per Hour: \$2.48

## Shipyard Dockhand - First Class

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.61
Supplemental Benefit Rate per Hour: \$2.86

## Shipyard Dockhand - Second Class

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$15.94
Supplemental Benefit Rate per Hour: \$2.56

## 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 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

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

## SIGN ERECTOR <br> (Sheet Metal, Plastic, Electric, and Neon)

## Sign Erector

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.60
Supplemental Benefit Rate per Hour: $\$ 46.28$

## 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
Washington's Birthday
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 I

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$55.00
Supplemental Benefit Rate per Hour: \$52.79
Supplemental Note: Overtime supplemental benefit rate: $\$ 104.84$

## Steamfitter -Temporary Services

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twentyfour hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.80
Supplemental Benefit Rate per Hour: \$42.76
Supplemental Note: .

## Overtime

Double time the regular rate after a 7 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

Work performed between 3:30 P.M. and 7:00 A.M. and on Saturdays, Sundays and Holidays shall be at double time the regular hourly rate and paid at the overtime supplemental benefit rate above.

## Steamfitter II

For heating, ventilation, air conditioning and mechanical public works contracts with a dollar value not to exceed $\$ 15,000,000$ and for fire protection/sprinkler public works contracts not to exceed $\$ 1,500,000$.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 55.00$
Supplemental Benefit Rate per Hour: $\mathbf{\$ 5 2 . 7 9}$
Supplemental Note: Overtime supplemental benefit rate: $\$ 104.84$

## Steamfitter -Temporary Services

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE 

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twentyfour hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$41.80
Supplemental Benefit Rate per Hour: \$42.76

## 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 <br> None

## Shift Rates

May be performed outside of the regular workday except Saturday, Sunday and Holidays. A shift shall consist of eight working hours. All work performed in excess of eight hours shall be paid at double time. No shift shall commence after 7:00 P.M. on Friday or 7:00 P.M. the day before holidays. All work performed after 12:01 A.M. Saturday or 12:01 A.M. the day before a Holiday will be paid at double time. When shift work is performed the wage rate for regular time worked is a thirty percent premium together with fringe benefits.

On Transit Authority projects, where work is performed in the vicinity of tracks all shift work on weekends and holidays may be performed at the regular shift rates.

## Local \#638

## STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

## Refrigeration and Air Conditioner Mechanic

§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 39.25$
Supplemental Benefit Rate per Hour: \$13.81

## Refrigeration and Air Conditioner Service Person V

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$32.25
Supplemental Benefit Rate per Hour: \$12.44

## Refrigeration and Air Conditioner Service Person IV

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$26.72
Supplemental Benefit Rate per Hour: $\$ 11.30$

## Refrigeration and Air Conditioner Service Person III

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$22.93
Supplemental Benefit Rate per Hour: $\$ 10.45$

## Refrigeration and Air Conditioner Service Person II

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$19.02
Supplemental Benefit Rate per Hour: \$9.67

## Refrigeration and Air Conditioner Service Person I

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$13.91
Supplemental Benefit Rate per Hour: \$8.78

## 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

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

 §220 PREVAILING WAGE SCHEDULEDouble time the regular rate for work on the following holiday(s).
New Year's Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
Christmas Day
Double time and one half the regular rate for work on the following holiday(s).
Martin Luther King Jr. Day
President's Day
Memorial Day
Columbus Day
Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
(Local \#638B)

## STONE MASON - SETTER

## Stone Mason - Setters

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$47.20
Supplemental Benefit Rate per Hour: $\$ 37.15$

## 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

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE

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: 7/1/2015-12/29/2015
Wage Rate per Hour: \$46.32
Supplemental Benefit Rate per Hour: \$22.66
Effective Period: 12/30/2015-6/30/2016
Wage Rate per Hour: \$46.82
Supplemental Benefit Rate per Hour: $\$ \mathbf{2 2 . 6 6}$

## 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
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.

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE 

## Shift Rates

Time and one half the regular rate outside the regular work hours (8:00 A.M. through 3:30 P.M.)

## TELECOMMUNICATION WORKER (Voice Installation Only)

## Telecommunication Worker

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.35
Supplemental Benefit Rate per Hour: \$13.19
Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. $\$ 12.64$ for Staten Island only.

## 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
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

## Paid Holidays

New Year's Day
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §220 PREVAILING WAGE SCHEDULE 

Thanksgiving Day
Christmas Day
Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

## Shift Rates

For any workday that starts before 8A.M. or ends after 6P.M. there is a $\mathbf{1 0 \%}$ differential for the applicable worker's hourly rate.

(C.W.A.)

## TILE FINISHER

## Tile Finisher

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$40.03
Supplemental Benefit Rate per Hour: $\mathbf{\$ 2 9 . 7 1}$

## 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
Christmas Day

## Paid Holidays

None

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

## 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 ( $11 / 4$ ) 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: 7/1/2015-6/30/2016
Wage Rate per Hour: \$51.61
Supplemental Benefit Rate per Hour: $\mathbf{\$ 3 3 . 4 6}$

## 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
Christmas Day

## Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter ( $11 / 4$ ) times the regular straight time rate of pay for the seven hours of actual off-shift work.
(Local \#7)

## TIMBERPERSON

## Timberperson

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$45.60
Supplemental Benefit Rate per Hour: \$46.67

## 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.
Time and one half the regular hourly rate after 40 hours in any work week.

## 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.

## TUNNEL WORKER

## Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$59.17
Supplemental Benefit Rate per Hour: $\$ 49.45$

## Tunnel Workers (Compressed Air Rates)

Effective Period: 7/1/2015-6/30/2016

Wage Rate per Hour: \$57.12
Supplemental Benefit Rate per Hour: $\$ 47.80$

## Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$56.07
Supplemental Benefit Rate per Hour: \$46.96

## Outside Lock Tender, Outside Gauge Tender,Muck Lock Tender (Compressed

## Air Rates)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$55.06
Supplemental Benefit Rate per Hour: \$46.07

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

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$55.06
Supplemental Benefit Rate per Hour: $\$ 46.07$
Changehouse Attendant: Powder Watchperson (Compressed Air Rates)
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$48.16
Supplemental Benefit Rate per Hour: \$43.62

## Blasters (Free Air Rates)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$56.47
Supplemental Benefit Rate per Hour: \$47.47.

## Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$54.04
Supplemental Benefit Rate per Hour: \$45.45

## All Others (Free Air Rates)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$49.93
Supplemental Benefit Rate per Hour: \$42.06
Microtunneling (Free Air Rates)

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$43.23
Supplemental Benefit Rate per Hour: \$36.36

## Overtime Description

For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 7 hour day, or for Saturday, or for Sunday. Double time the regular rate for work on a holiday.
For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.

## Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

## Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day
(Local \#147)

## WELDER

TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE PERFORMING THE WORK.

## OFFICE OF THE COMPTROLLER

## CITY OF NEW YORK

## 220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

## APPENDIX

Pursuant to Labor Law $\S 220$ (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 employed on a public work project.
Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the journey person wage rate for the classification of work he actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE <br> TABLE OF CONTENTS

CLASSIFICATION ..... PAGE
ASBESTOS HANDLER ..... 3
BOILERMAKER ..... 3
BRICKLAYER ..... 4
CARPENTER ..... 5
CEMENT MASON ..... 6
CEMENT AND CONCRETE WORKER ..... 6
DERRICKPERSON \& RIGGER (STONE) ..... 7
DOCKBUILDER/PILE DRIVER ..... 8
ELECTRICIAN ..... 8
ELEVATOR CONSTRUCTOR ..... 10
ELEVATOR REPAIR \& MAINTENANCE ..... 11
ENGINEER ..... 12
ENGINEER - OPERATING ..... 13
FLOOR COVERER ..... 14
GLAZIER ..... 14
HEAT \& FROST INSULATOR ..... 15
HOUSE WRECKER ..... 16
IRON WORKER - ORNAMENTAL ..... 16
IRON WORKER - STRUCTURAL ..... 17
LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER \& COMMON) ..... 18
MARBLE MECHANICS ..... 19
MASON TENDER ..... 20
METALLIC LATHER ..... 21
MILLWRIGHT ..... 22
PAVER AND ROADBUILDER ..... 22
PAINTER ..... 23
PAINTER - STRUCTURAL STEEL ..... 24
PLASTERER ..... 24
PLUMBER ..... 25
POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION) ..... 26
ROOFER ..... 27
SHEET METAL WORKER ..... 28
SIGN ERECTOR ..... 29
STEAMFITTER ..... 30
STONE MASON - SETTER. ..... 31
TAPER ..... 32
TILE LAYER - SETTER ..... 32
TIMBERPERSON ..... 33
ASBESTOS HANDLER(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)
Asbestos Handler (First 1000 Hours)
Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 78\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 15.95$
Asbestos Handler (Second 1000 Hours)
Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rateSupplemental Benefit Rate Per Hour: \$15.95
Asbestos Handler (Third 1000 Hours)
Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 83\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$15.95
Asbestos Handler (Fourth 1000 Hours)
Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 89\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\mathbf{\$ 1 5 . 9 5}$
(Local \#78)

## BOILERMAKER

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

## Boilermaker (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 30.00$

## Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 70\% of Journeyperson's rate

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK

 §220 APPRENTICESHIP PREVAILING WAGE SCHEDULESupplemental Benefit Rate Per Hour: $\mathbf{\$ 3 1 . 6 6}$

## Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 33.32$

## Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 35.00$

## Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 85\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 36.67$

## Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $\mathbf{9 0 \%}$ of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 38.34$

## Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 95\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 40.01$
(Local \#5)

## BRICKLAYER

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

## Bricklayer (First 750 Hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\$ 17.10$

## Bricklayer (Second 750 Hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$17.10

## Bricklayer (Third 750 Hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 70\% of Journeyperson's rate Supplemental Benefit Rate Per Hour: $\$ 17.10$

## Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$17.10

## Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 90\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$17.10

## Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 95\% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$17.10
(Bricklayer District Council)

## CARPENTER

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

## Carpenter (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 40\% of Journeyperson's rate Supplemental Benefit Rate Per Hour: \$31.14

## Carpenter (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$31.14

## Carpenter (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$31.14

## Carpenter (Fourth Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$31.14
(Carpenters District Council)

## CEMENT MASON

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

## Cement Mason (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 50\% of Journeyperson's Rate

## Cement Mason (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 60\% of Journeyperson's Rate

## Cement Mason (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 70\% of Journeyperson's Rate
(Local \#780)

## CEMENT AND CONCRETE WORKER

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

## Cement \& Concrete Worker (First 1333 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $50 \%$ of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$18.84

## Cement \& Concrete Worker (Second 1333 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$24.65

## Cement \& Concrete Worker (Last 1334 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$25.47
(Cement Concrete Workers District Council)

## DERRICKPERSON \& RIGGER (STONE)

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

## Derrickperson \& Rigger (stone) - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $\mathbf{5 0 \%}$ of Journeyperson's rate

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

Effective Period: 7/1/2015-6/30/2016
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: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate Supplemental Benefit Rate Per Hour: 75\% of Journeyperson's rate

## Derrickperson \& Rigger (stone) - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $90 \%$ of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75\% of Journeyperson's rate

## DOCKBUILDER/PILE DRIVER

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

## Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 40\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$31.52

## Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$31.52

## Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate Supplemental Benefit Rate Per Hour: $\mathbf{\$ 3 1 . 5 2}$

## Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$31.52
(Carpenters District Council)

## ELECTRICIAN

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

## Electrician (First Term: 0-6 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 13.00$
PUBLISH DATE: 7/1/2015

Supplemental Benefit Rate per Hour: \$11.61
Overtime Supplemental Rate Per Hour: \$12.47

## Electrician (First Term: 7-12 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$14.00
Supplemental Benefit Rate per Hour: \$12.12
Overtime Supplemental Rate Per Hour: \$13.04

## Electrician (Second Term: 0-6 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$15.00
Supplemental Benefit Rate per Hour: \$12.63
Overtime Supplemental Rate Per Hour: \$13.62

## Electrician (Second Term: 7-12 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$16.00
Supplemental Benefit Rate per Hour: \$13.14
Overtime Supplemental Rate Per Hour: \$14.19

## Electrician (Third Term: 0-6 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$17.00
Supplemental Benefit Rate per Hour: \$13.65
Overtime Supplemental Rate Per Hour: \$14.77

## Electrician (Third Term: 7-12 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$18.00
Supplemental Benefit Rate per Hour: \$14.16
Overtime Supplemental Rate Per Hour: $\mathbf{\$ 1 5 . 3 4}$

## Electrician (Fourth Term: 0-6 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$19.00
Supplemental Benefit Rate per Hour: \$14.67
Overtime Supplemental Rate Per Hour: \$15.92

## Electrician (Fourth Term: 7-12 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$21.00

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: $\$ 15.68$
Overtime Supplemental Rate Per Hour: \$17.07

## Electrician (Fifth Term: 0-12 Months - Hired on or after 5/10/07)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.00
Supplemental Benefit Rate per Hour: \$18.56
Overtime Supplemental Rate Per Hour: \$20.00

## Electrician (Fifth Term: 13-18 Months - Hired on or after 5/10/07)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.50
Supplemental Benefit Rate per Hour: \$20.82
Overtime Supplemental Rate Per Hour: \$22.54

## Electrician (Fifth Term: 0-18 Months - Hired before 5/10/07)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ \mathbf{2 6 . 8 0}$
Supplemental Benefit Rate per Hour: \$20.46
Overtime Supplemental Rate Per Hour: \$22.14

## Overtime Description

Overtime Wage paid at time and one half the regular rate
For "A" rated Apprentices (work in excess of 7 hours per day)
For "M" rated Apprentices (work in excess of 8 hours per day)
(Local \#3)

## ELEVATOR CONSTRUCTOR (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

## Elevator (Constructor) - First Year

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Rate Per Hour: \$26.94
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 28.41$

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE 

## Elevator (Constructor) - Second Year

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate
Supplemental Rate Per Hour: \$27.35
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate Supplemental Rate Per Hour: \$28.84

## Elevator (Constructor) - Third Year

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Rate Per Hour: \$28.17
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate Supplemental Rate Per Hour: \$29.69

## Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate Supplemental Rate Per Hour: $\mathbf{\$ 2 9 . 0 0}$

Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate Supplemental Rate Per Hour: $\$ 30.54$
(Local \#1)

## ELEVATOR REPAIR \& MAINTENANCE

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

## Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Benefit Per Hour: \$26.87
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Benefit Per Hour: $\mathbf{\$ 2 8 . 3 4}$

## Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate
Supplemental Benefit Per Hour: $\mathbf{\$ 2 7 . 2 7}$
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate
Supplemental Benefit Per Hour: \$28.76

## Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Benefit Per Hour: $\mathbf{\$ 2 8 . 0 8}$
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Benefit Per Hour: \$29.60

## Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2015-3/16/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Benefit Per Hour: \$28.89
Effective Period: 3/17/2016-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Benefit Per Hour: \$30.43
(Local \#1)

## ENGINEER

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

## Engineer - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.68
Supplemental Benefit Rate per Hour: \$22.55

## Engineer - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$29.60
Supplemental Benefit Rate per Hour: \$22.55

## Engineer - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$32.56
Supplemental Benefit Rate per Hour: \$22.55

## Engineer - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$35.52
Supplemental Benefit Rate per Hour: \$22.55
(Local \#15)

## ENGINEER - OPERATING <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

## Operating Engineer - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour $\mathbf{4 0 \%}$ of Journeyperson's Rate
Supplemental Benefit Per Hour: \$20.15

## Operating Engineer - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's Rate Supplemental Benefit Per Hour: $\mathbf{\$ 2 0 . 1 5}$

## Operating Engineer - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's Rate
Supplemental Benefit Per Hour: $\mathbf{\$ 2 0 . 1 5}$
(Local \#14)

## FLOOR COVERER

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

## Floor Coverer (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 40\% of Journeyperson's rate
Supplemental Rate Per Hour: $\mathbf{\$ 3 1 . 1 4}$

## Floor Coverer (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 31.14$

## Floor Coverer (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Rate Per Hour: \$31.14

## Floor Coverer (Fourth Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Rate Per Hour: \$31.14
(Carpenters District Council)

## GLAZIER

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

## Glazier (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 40\% of Journeyperson's rate
Supplemental Rate Per Hour: \$13.64
Effective 11/1/2015 - Supplemental Rate Per Hour: \$13.79

## Glazier (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE 

Supplemental Rate Per Hour: $\$ 22.97$
Effective 11/1/2015 - Supplemental Rate Per Hour: $\$ 23.13$

## Glazier (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 25.87$
Effective 11/1/2015 - Supplemental Rate Per Hour: \$26.03

## Glazier (Fourth Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 31.04$
Effective 11/1/2015 - Supplemental Rate Per Hour: $\$ 31.29$
(Local \#1281)

## HEAT \& FROST INSULATOR

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

## Heat \& Frost Insulator (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 40\% of Journeyperson's rate

## Heat \& Frost Insulator (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 60\% of Journeyperson's rate

## Heat \& Frost Insulator (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 70\% of Journeyperson's rate

## Heat \& Frost Insulator (Fourth Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 80\% of Journeyperson's rate
(Local \#12)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

## HOUSE WRECKER (TOTAL DEMOLITION) <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

## House Wrecker - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$21.17
Supplemental Benefit Rate per Hour: \$17.33

## House Wrecker - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$22.32
Supplemental Benefit Rate per Hour: \$17.33

## House Wrecker - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.97
Supplemental Benefit Rate per Hour: \$17.33

## House Wrecker - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$26.53
Supplemental Benefit Rate per Hour: \$17.33
(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

## Iron Worker (Ornamental) - 1st Ten Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 50\% of Journeyperson's rate
Supplemental Rate Per Hour: $\mathbf{\$ 3 6 . 5 0}$

## Iron Worker (Ornamental) - 11-16 Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate Supplemental Rate Per Hour: \$37.62

## Iron Worker (Ornamental) - 17-22 Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: \$38.73

## Iron Worker (Ornamental) - 23-28 Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 70\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 40.97$

## Iron Worker (Ornamental)-29-36 Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 43.20$
(Local \#580)

IRON WORKER - STRUCTURAL (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

## Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$25.48
Supplemental Benefit Rate per Hour: \$46.83
Iron Worker (Structural) - 7-18 Months
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$26.08
Supplemental Benefit Rate per Hour: \$46.83
Iron Worker (Structural)-19-36 months

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$26.68
Supplemental Benefit Rate per Hour: \$46.83
(Local \#40 and \#361)

## LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER \& COMMON) (Ratio Apprentice to Journeyperson: 1 to 1, 1 to 3)

## Laborer (Foundation, Concrete, Excavating, Street Pipe Layer \& Common) - First 1000 hours

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $50 \%$ of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 36.53$

## Laborer (Foundation, Concrete, Excavating, Street Pipe Layer \& Common) Second 1000 hours

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ \mathbf{3 6} .53$
Laborer (Foundation, Concrete, Excavating, Street Pipe Layer \& Common) Third 1000 hours

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 36.53$
Laborer (Foundation, Concrete, Excavating, Street Pipe Layer \& Common) Fourth 1000 hours

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 90\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 36.53$
(Local \#731)

## MARBLE MECHANICS

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

## Cutters \& Setters - First 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 50\% of Journeyperson's rate
NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

## Cutters \& Setters - Second 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 55\% of Journeyperson's rate

## Cutters \& Setters - Third 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 65\% of Journeyperson's rate

## Cutters \& Setters - Fourth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 75\% of Journeyperson's rate

## Cutters \& Setters - Fifth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 85\% of Journeyperson's rate

## Cutters \& Setters - Sixth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 95\% of Journeyperson's rate

## Polishers \& Finishers - First 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 50\% of Journeyperson's rate
NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

## Polishers \& Finishers - Second 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 60\% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

## Polishers \& Finishers - Third 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 75\% of Journeyperson's rate

## Polishers \& Finishers - Fourth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 90\% of Journeyperson's rate
(Local \#7)

## MASON TENDER <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

## Mason Tender - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$21.39
Supplemental Benefit Rate per Hour: \$18.44

## Mason Tender-Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$22.54
Supplemental Benefit Rate per Hour: \$18.44

## Mason Tender - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$24.29.
Supplemental Benefit Rate per Hour: \$18.49

## Mason Tender - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$26.95
Supplemental Benefit Rate per Hour: \$18.49
(Local \#79)
METALLIC LATHER(Ratio of Apprentice to Journeyperson: 1 to 1,1 to 3)
Metallic Lather (First Year -Called Prior to 6/29/11)
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$29.41
Supplemental Benefit Rate per Hour: \$22.89
Metallic Lather (Second Year - Called Prior to 6/29/11)
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$34.01
Supplemental Benefit Rate per Hour: \$24.54
Metallic Lather (Third Year - Called Prior to 6/29/11)
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$39.07
Supplemental Benefit Rate per Hour: \$25.69
Metallic Lather (First Year -Called On Or After 6/29/11)
Effective Period: 7/1/2015 - 6/30/2016
Wage Rate per Hour: \$23.01
Supplemental Benefit Rate per Hour: \$17.95
Metallic Lather (Second Year - Called On Or After 6/29/11)
Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$28.11
Supplemental Benefit Rate per Hour: \$17.95

## Metallic Lather (Third Year - Called On Or After 6/29/11)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$33.21
Supplemental Benefit Rate per Hour: $\$ 17.95$
(Local \#46)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

## MILLWRIGHT

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

## Millwright (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.23
Supplemental Benefit Rate per Hour: \$34.06

## Millwright (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$32.18
Supplemental Benefit Rate per Hour: \$37.62

## Millwright (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$37.13
Supplemental Benefit Rate per Hour: \$41.83

## Millwright (Fourth Year)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$47.03
Supplemental Benefit Rate per Hour: $\mathbf{\$ 4 8 . 3 1}$

## PAVER AND ROADBUILDER

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

## Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.05
Supplemental Benefit Rate per Hour: \$17.12

## Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$28.69
Supplemental Benefit Rate per Hour: \$17.12
(Local \#1010)

## PAINTER <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

## Painter - Brush \& Roller - First Year

Effective Period: 7/1/2015-10/31/2015
Wage Rate per Hour: \$15.80
Supplemental Benefit Rate per Hour: \$11.88
Effective Period: 11/1/2015-6/30/2016
Wage Rate per Hour: \$16.40
Supplemental Benefit Rate per Hour: \$12.13

## Painter - Brush \& Roller - Second Year

Effective Period: 7/1/2015-10/31/2015
Wage Rate per Hour: \$19.75
Supplemental Benefit Rate per Hour: \$15.73
Effective Period: 11/1/2015-6/30/2016
Wage Rate per Hour: \$20.50
Supplemental Benefit Rate per Hour: \$15.98

## Painter - Brush \& Roller - Third Year

Effective Period: 7/1/2015-10/31/2015
Wage Rate per Hour: \$23.70
Supplemental Benefit Rate per Hour: \$18.64
Effective Period: 11/1/2015-6/30/2016
Wage Rate per Hour: $\$ 24.60$
Supplemental Benefit Rate per Hour: \$18.89

## Painter - Brush \& Roller - Fourth Year

Effective Period: 7/1/2015-10/31/2015
Wage Rate per Hour: \$31.60

Supplemental Benefit Rate per Hour: \$24.02
Effective Period: 11/1/2015-6/30/2016
Wage Rate per Hour: \$32.80
Supplemental Benefit Rate per Hour: \$24.27
(District Council of Painters)

## PAINTER - STRUCTURAL STEEL

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

## Painters - Structural Steel (First Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: $\mathbf{4 0 \%}$ of Journeyperson's rate

## Painters - Structural Steel (Second Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 60\% of Journeyperson's rate

## Painters - Structural Steel (Third Year)

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 80\% of Journeyperson's rate

## PLASTERER

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

## Plasterer - First Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 40\% of Journeyperson's rate
Supplemental Rate Per Hour: \$15.76

## Plasterer - First Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $45 \%$ of Journeyperson's rate
Supplemental Rate Per Hour: \$16.24

## Plasterer - Second Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate
Supplemental Rate Per Hour: \$18.21

## Plasterer - Second Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 19.29$

## Plasterer - Third Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 70\% of Journeyperson's rate
Supplemental Rate Per Hour: \$21.46

## Plasterer - Third Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Rate Per Hour: \$22.54
(Local \#530)

## PLUMBER

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

## Plumber - First Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$14.00
Supplemental Benefit Rate per Hour: \$0.71

## Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\$ 14.00$

## Plumber - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$23.87
Supplemental Benefit Rate per Hour: \$12.76

## Plumber - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$25.97
Supplemental Benefit Rate per Hour: \$12.76

## Plumber - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$28.82
Supplemental Benefit Rate per Hour: \$12.76

## Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$30.22
Supplemental Benefit Rate per Hour: \$12.76

## Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$42.29
Supplemental Benefit Rate per Hour: \$12.76
(Plumbers Local \#1)

## POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION) <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

## Pointer - Waterproofer, Caulker Mechanic - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$25.01

# Pointer - Waterproofer, Caulker Mechanic - Second Year 

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$27.25
Supplemental Benefit Rate per Hour: \$9.70

## Pointer - Waterproofer, Caulker Mechanic - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$32.24
Supplemental Benefit Ràte per Hour: \$12.45

## Pointer - Waterproofer, Caulker Mechanic - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$38.66
Supplemental Benefit Rate per Hour: \$12.45
(Bricklayer District Council)

## ROOFER

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

## Roofer - First Year

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 35\% of Journeyperson's Rate

## Roofer - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 50\% of Journeyperson's Rate

## Roofer - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 60\% of Journeyperson's Rate

## Roofer - Fourth Year

Effective Period: 7/1/2015-6/30/2016

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE
Wage and Supplemental Rate Per Hour: 75\% of Journeyperson's Rate
(Local \#8)

## SHEET METAL WORKER

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

## Sheet Metal Worker (0-6 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 25\% of Journeyperson's rate
Supplemental Rate Per Hour: \$6.24

## Sheet Metal Worker (7-18 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 35\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 16.71$

## Sheet Metal Worker (19-30 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 45\% of Journeyperson's rate
Supplemental Rate Per Hour: $\mathbf{\$ 2 3 . 0 0}$

## Sheet Metal Worker (31-36 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate
Supplemental Rate Per Hour: \$27.02

## Sheet Metal Worker (37-42 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: \$29.06

## Sheet Metal Worker (43-48 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 70\% of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 33.10$

## Sheet Metal Worker (49-54 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Rate Per Hour: \$35.12

## Sheet Metal Worker (55-60 Months)

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Rate Per Hour: $\mathbf{\$ 3 7 . 1 5}$
(Local \#28)

## SIGN ERECTOR <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

## Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 35\% of Journeyperson's rate
Supplemental Rate Per Hour: \$13.18

## Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $40 \%$ of Journeyperson's rate
Supplemental Rate Per Hour: \$14.95

## Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 45\% of Journeyperson's rate
Supplemental Rate Per Hour: \$16.74

## Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $50 \%$ of Journeyperson's rate Supplemental Rate Per Hour: \$18.52

## Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 55\% of Journeyperson's rate
Supplemental Rate Per Hour: \$24.94

## Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: \$26.87

## Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate
Supplemental Rate Per Hour: $\mathbf{\$ 2 9 . 4 7}$

## Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 70\% of Journeyperson's rate
Supplemental Rate Per Hour: \$31.46

## Sign Erector - Fifth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 75\% of Journeyperson's rate
Supplemental Rate Per Hour: \$33.43

## Sign Erector - Sixth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate
Supplemental Rate Per Hour: \$35.41
(Local \#137)

## STEAMFITTER

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

## Steamfitter - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate and Supplemental Per Hour: 40\% of Journeyperson's rate

## Steamfitter - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate and Supplemental Rate Per Hour: 50\% of Journeyperson's rate.

## Steamfitter - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate and Supplemental Rate per Hour: 65\% of Journeyperson's rate.

## Steamfitter - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate and Supplemental Rate Per Hour: 80\% of Journeyperson's rate.

## Steamfitter - Fifth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate and Supplemental Rate Per Hour: 85\% of Journeyperson's rate.

## STONE MASON - SETTER

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

## Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 50\% of Journeyperson's rate

## Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 60\% of Journeyperson's rate
Supplemental Rate Per Hour: 50\% of Journeyperson's rate

## Stone Mason - Setters - Third 750 Hours

Effective Period: 7/1/2015-6/30/2016
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: 7/1/2015-6/30/2016
Wage Rate Per Hour: 80\% of Journeyperson's rate Supplemental Rate Per Hour: $50 \%$ of Journeyperson's rate

## Stone Mason - Setters - Fifth $\mathbf{7 5 0}$ Hours

Effective Period: 7/1/2015-6/30/2016
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: 7/1/2015-6/30/2016
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: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 40\% of Journeyperson's rate

## Drywall Taper - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 60\% of Journeyperson's rate

## Drywall Taper - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 80\% of Journeyperson's rate
(Local \#1974)

## TILE LAYER - SETTER

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

## Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2015-6/30/2016

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

## Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 55\% of Journeyperson's rate

## Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 65\% of Journeyperson's rate

## Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 75\% of Journeyperson's rate

## Tile Layer - Setter - Fifth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: $85 \%$ of Journeyperson's rate

## Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2015-6/30/2016
Wage and Supplemental Rate Per Hour: 95\% of Journeyperson's rate
(Local \#7)

## TIMBERPERSON <br> (Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

## Timberperson - First Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 40\% of Journeyperson's rate Supplemental Rate Per Hour: \$31.54

## Timberperson - Second Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $50 \%$ of Journeyperson's rate
Supplemental Rate Per Hour: $\$ 31.54$

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §220 APPRENTICESHIP PREVAILING WAGE SCHEDULE 

## Timberperson - Third Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: 65\% of Journeyperson's rate Supplemental Rate Per Hour: $\$ 31.54$

## Timberperson - Fourth Year

Effective Period: 7/1/2015-6/30/2016
Wage Rate Per Hour: $80 \%$ of Journeyperson's rate Supplemental Rate Per Hour: $\$ 31.54$

## NYC ADMINISTRATIVE CODE § 6-109 SCHEDULE OF "LIVING WAGES"

Contractors who provide the following services to the City of New York must post a copy of this Living Wage Schedule at their work site(s) as required by New York City Administrative Code § 6-109:

- Building Services,
- Day Care Services,
- Food Services,
- Head Start Services,
- Homecare Services,
- Services to Persons with Cerebral Palsy, and
- Temporary Services.

In accordance with NYC Administrative Code § 6-109, the Comptroller of the City of New York promulgated this schedule of living wages for the above services on contracts for non-emergency work in excess of the small purchase limit set by the Procurement Policy Board; contracting agencies must annex this schedule to such contracts.

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 New York City Administrative Code section 6-109. 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.

A city service contractor or subcontractor that provides homecare services, day care services, head start services or services to persons with cerebral palsy must pay its covered employees that directly render such services in performance of the city service contract or subcontract no less than the living wage and must provide its employees health benefits (supplemental benefits) or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. This requirement applies for each hour that the employee works performing the city service contract or subcontract.

A city service contractor or subcontractor that provides building services, food services or temporary services must pay its employees that are engaged in performing the city service contract or subcontract no less than the living wage or the prevailing wage, whichever is greater. Where the living wage is greater than the prevailing wage, the city service contractor or subcontractor must either provide its employees health benefits or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. Where the prevailing wage is greater than the living wage, the city service contractor or subcontractor must provide its employees the prevailing wage and supplements. These requirements apply for each hour that the employee works performing the city service contract or subcontract.

The appropriate schedule of living wages must be posted at all work sites pursuant to NYC Administrative Code 6-109.

The schedule is applicable for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site www.comptroller.nyc.gov. Schedules for future one-year periods will be published annually in the City Record on or about July $1^{\text {st }}$ of each succeeding year and on our web site www.comptroller.nyc.gov.

## OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §6-109 PREVAILING WAGE SCHEDULE

The living wage rate and the health benefit supplement rate are known through June 30 of each year and those rates are listed in this schedule.

The living wage rates listed in this schedule may not include all hourly wage calculations for overtime, shift differential, Holiday, Saturday, Sunday or other premium time work. Similarly, this schedule does not set forth every living wage practice with which employers must comply.

Some of the rates in this schedule are based on collective bargaining agreements. These agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Answers to questions concerning prevailing wage practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to; Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Contractors are solely responsible for maintaining original payroll records, which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, an agency's chief contracting officer must contact the Bureau of Labor Law to obtain a wage determination for a work classification not published in this schedule.

The information listed below is intended to assist you in meeting your living wage and prevailing wage obligation. Contractors are advised to review the Comptroller's Living Wage Schedule prior to submitting a bid for City work. Any wage rate error made by the contracting agency in the contract documents will not preclude a finding against the contractor for an underpayment of the applicable living wage or the applicable prevailing wage.

This schedule sets forth the living wage and benefit rates required to be annexed to and form part of the contract specifications for work covered by New York City Administrative Code § 6-109. Contractors performing such work are required to pay not less that the rates specified in this schedule for the applicable trade or occupation.

## Benefits are paid for EACH HOUR WORKED unless otherwise noted.

Wasyl Kinach, P.E.
Director of Classifications
Bureau of Labor Law

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §6-109 PREVAILING WAGE SCHEDULE 

## TABLE OF CONTENTS

CLASSIFICATION PAGE
BUILDING CLEANER AND MAINTAINER (OFFICE) ..... 4
BUILDING CLEANER AND MAINTAINER (RESIDENTIAL) ..... 4
CLEANER (PARKING GARAGE) ..... 4
DAY CARE SERVICES ..... 4
FOOD SERVICE EMPLOYEES ..... 4
GARDENER. ..... 5
HEAD START SERVICES ..... 5
HOMECARE SERVICES ..... 6
SECURITY GUARD (ARMED) ..... 6
SECURITY GUARD (UNARMED) ..... 6
SERVICES TO PERSONS WITH CEREBRAL PALSY ..... 7
TEMPORARY OFFICE SERVICES ..... 7
WINDOW CLEANER ..... 8

## BUILDING CLEANER AND MAINTAINER (OFFICE)

For the above building service classification, see the Labor Law Section 230 Schedule.

## BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)

For the above building service classification, see the Labor Law Section 230 Schedule.

## CLEANER (PARKING GARAGE)

For the above building service classification, see the Labor Law Section 230 Schedule.

## DAY CARE SERVICES

## Day Care Services

'Day Care Services' means provision of day care services through the city's center-based day care program administered under contract with the city's Administration for Children's Services. No other day care programs shall be covered, including family-based day care programs administered by city-contracted day care centers.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$10.00
Supplemental Benefit Rate per Hour: $\mathbf{\$ 1 . 5 0}$
(NYC Administrative Code §6-109)

## FOOD SERVICE EMPLOYEES

## Cook

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK §6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$16.63
Supplemental Benefit Rate per Hour: \$1.70

## Cafeteria Attendant

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$11.67
Supplemental Benefit Rate per Hour: \$1.70

## Counter Attendant

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$11.22
Supplemental Benefit Rate per Hour: \$1.70

## Kitchen Helper / Dishwasher

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$11.04
Supplemental Benefit Rate per Hour: \$1.70

## Overtime

Time and one half the regular hourly rate after $\mathbf{4 0}$ hours in any work week.
(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

## GARDENER

For the above building service classification, see the Labor Law Section 230 Schedule.

## HEAD START SERVICES

## Head Start Services

'Head Start Services' means provision of head start services through the city's center-based head start program administered under contract with the city's Administration for Children's Services. No other head start programs shall be covered.

# OFFICE OF THE COMPTROLLER, CITY OF NEW YORK <br> §6-109 PREVAILING WAGE SCHEDULE 

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$10.00
Supplemental Benefit Rate per Hour: $\$ 1.50$
(NYC Administrative Code §6-109)

## HOMECARE SERVICES

## Home Care Services

'Homecare Services' means the provision of homecare services under the city's Medicaid Personal Care/Home Attendant or Housekeeping Programs, including but not limited to the In-Home Services for the Elderly Programs administered by the Department for the Aging.
For homecare services provided under the Personal Care Services program, the wage and supplemental benefit rate above shall apply only as long as the state and federal government maintain their combined aggregate proportionate share of funding and approved rates for homecare services in effect as of the date of the enactment of this section.
For contractors or subcontractors providing homecare services, the supplemental benefit rate may be waived by the terms of a bona fide collective bargaining agreement with respect to employees who have never worked a minimum of eighty ( 80 ) hours per month for two consecutive months for that covered employer, but such provision may not be waived for any employee once a minimum of eighty (80) hours for two consecutive months has been achieved.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$10.00
Supplemental Benefit Rate per Hour: $\mathbf{\$ 1 . 5 0}$
(NYC Administrative Code §6-109)

## SECURITY GUARD (ARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

## SECURITY GUARD (UNARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

## SERVICES TO PERSONS WITH CEREBRAL PALSY

## Services To Person With Cerebral Palsy

'Services to Persons with Cerebral Palsy' means provision of services which enable persons with cerebral palsy and related disabilities to lead independent and productive lives through an agency that provides health care, education, employment, housing and technology resources to such persons under contract with the city or the department of education.

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: $\mathbf{\$ 1 0 . 0 0}$
Supplemental Benefit Rate per Hour: \$1.50
(NYC Administrative Code §6-109)

## TEMPORARY OFFICE SERVICES

## Administrative Assistant

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$33.89
Supplemental Benefit Rate per Hour: None

## Cashier

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$11.50
Supplemental Benefit Rate per Hour: None

## Clerk (various)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$15.50
Supplemental Benefit Rate per Hour: None

## Computer Assistant

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$20.12
Supplemental Benefit Rate per Hour: None

## Data Entry Operator

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$16.38
Supplemental Benefit Rate per Hour: None

## Receptionist

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$15.29
Supplemental Benefit Rate per Hour: None

## Secretary (various)

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$19.58
Supplemental Benefit Rate per Hour: None

## Word Processor

Effective Period: 7/1/2015-6/30/2016
Wage Rate per Hour: \$18.32
Supplemental Benefit Rate per Hour: None

## Overtime

Time and one half the regular hourly rate after 40 hours in any work week.
(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics or NYC Administrative Code §6-109)

## WINDOW CLEANER

For the above building service classification, see the Labor Law Section 230 Schedule.

Leonard A. Mancusi SEMIOR ASEISTANT COMPTROLLER

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET ROOM 1120 NEW YORK, N.Y. 10007-2341

ALANG. HEVESI<br>COMPTROLER MEMORANDUM<br>COMPTROLER MEMORANDUM

November 6, 2000

## To Agency Chief Contracting Officers

From:
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, suí-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 §6-1.09 of the Administrafive Code.

As always, your cooperation is appreciated.
-LAM:er
ACCO.SECURITY AT STTES

# Department of Design and <br> Construction 

INFRASTRUCTURE DIVISION BUREAU OF DESIGN

## VOLUME 2 OF 3

Dated , 20 $\qquad$

APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY

Acting Corporation Counsel

Dated
, 20


Department of Design and Construction

## VOLUME 3 OF 3

## SCHEDULE A

SPECIFICATIONS AND REVISIONS TO STANDARD SPECIFICATIONS

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

## PROJECT ID: HWR100PAD

HYLAN BOULEVARD
BUS PADS FOR SELECT BUS SERVICE
INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK


FOR THE DEPARTMENT OF TRANSPORTATION PREPARED BY
GANDHI ENGINEERING INC.

## INFRASTRUCTURE DIVISION BUREAU OF DESIGN

## VOLUME 2 OF 3

HWR100PAD

HYLAN BOULEVARD

BUS PADS FOR SELECT BUS SERVICE

INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKLYN AND STATEN ISLAND CITY OF NEW YORK


Dated $\qquad$ , 20 $\qquad$

APPROVED AS TO FORM


Acting Corporation Counsel

## SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at: http://www.nyc.gov/html/ddc/html/pubs/pubs infrastdts.shtml or for purchase contact Ms. Vivian Valdez, (212) 839-9435

New York City Department of Transportation
Office of the Agency Chief Contracting Officer/Contract Management Unit
55 Water Street, Ground Floor (Bid Window)
N.Y., NY 10041

1. NYCDOT Standard Highway Specifications, August 1, 2015
2. NYCDOT Standard Highway Details of Construction, July 1, 2010
3. NYCDOT Division of Street Lighting Specifications
4. NYCDOT Division of Street Lighting Standard Drawings
5. NYCDOT Standard Specifications for Traffic Signals
6. NYCDOT Standard Drawings for Traffic Signals

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at: http://www.nyc.gov/html/ddc/html/pubs/pubs infrastats.shtml or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30. Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101.
Contact: Mr. Waqar Ahmad, Tel. (718) 391-2056

1. NYCDEP Standard Sewer and Water Main Specifications, July 1, 2014
2. NYCDEP Instructions for Concrete Specifications, Jan. 92
3. NYCDEP General Specification 11-Concrete, November 1991
4. NYCDEP Sewer Design Standards, (September 2007) Revised January 2009

The following reference documents for New York City Department of
Environmental Protection (NYCDEP) are available on-line at:
http://www.nyc.gov/html/ddc/html/pubs/pubs infrastdts.shtml or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101.
Contact: Mr. Robert Kuhlmann, Tel. (718) 391-2145

1. NYCDEP Water Main Standard Drawings
2. Specifications for Trunk Main Work, dated July 2014
3. Standards for Green Infrastructure, latest version, available only on-line at:
http://www.nyc.gov/html/dep/html/stormwater/green infrastructure standar ds.stml
Water main work material specifications are available at the Department of Environmental Protection, 59-17 Junction Boulevard, 3rd Floor Low-Rise Building, Flushing, N.Y. 11373-5108.
Contact: Mr. Tarlock Sahansra, P.E., Tel. (718) 595-5302 E-mail: TSAHANSRA@DEP.NYC.GOV

Standard Specifications and Drawings for New York City Fire Department Communications facilities are available 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

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

SPECIFICATIONS AND STANDARDS OF PRIVATE UTILITIES
The Following reference document for Private Utility Work is available for pick up between 8:30 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, First floor Bid Procurement Room, L.I.C., N.Y. 11101.

1. CET SPECIFICATIONS AND SKETCHES dated November 2010

## SCHEDULE A

## GENERAL CONDITIONS TO CONSTRUCTION CONTRACT

PART I. REQUIRED INFORMATION

## INFORMATION FOR BIDDERS SECTION 26

 BID SECURITYThe Contractor shall obtain a bid security in the amount indicated to the right.

INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS

The Contractor shall obtain performance and payment bonds in the amount indicated to the right.

## CONTRACT ARTICLE 14. DATE FOR SUBSTANTIAL COMPLETION

The Contractor shall substantially complete the Work in the number of calendar days indicated to the right.

## 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.

## 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.

## CONTRACT ARTICLE 21. <br> RETAINAGE

Not to exceed $50 \%$ of the Contract price
$0 \%$ of the value of the Work

Project ID.: HWR100PAD

| CONTRACT ARTICLE 22. <br> (Per Directions Below) | See pages SA-5 through SA-13 |
| :---: | :---: |
| CONTRACT ARTICLE 24. <br> DEPOSIT GUARANTEE <br> As security for the faithful performance of its obligations, the Contractor, upon filing its requisition for payment on Substantial Completion, shall deposit with the Commissioner a sum equal to the percentage of the Contract price indicated to the right. | 1\% of Contract price |
| $\text { CONTRACT ARTICLE } 24 .$ PERIOD OF GUARANTEE <br> Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right. | Eighteen (18) Months, excluding Trees <br> Twenty-four (24) Months for Tree Planting |
| $\begin{aligned} & \hline \text { CONTRACT ARTICLE } 74 \\ & \text { STATEMENT OF WORK } \\ & \hline \end{aligned}$ <br> The Contractor shall furnish all labor and materials and perform all Work in strict accordance with the Contract Drawings, Specifications, and all Addenda thereto. | See Contract Article 74 |
| CONTRACT ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR <br> The City shall pay and the Contractor shall accept in full consideration for the performance of the Contract, subject to additions and deductions as provided in Contract Article 75, 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. | See Contract Article 75 |
| CONTRACT ARTICLE 78. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT | EXEMPT <br> (A DBE utilization goal of eleven percent (11\%) has been established for this Contract) |

## STANDARD HIGHWAY SPECIFICATIONS SECTION 6.40 LIOUIDATED 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.
STANDARD HIGHWAY SPECIFICATIONS
SECTION 6.70
LIQUIDATED DAMAGES FOR
MAINTENANCE AND PROTECTION OF TRAFFIC

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.
$\$ \underline{250.00}$ for each calendar day of deficiency
$\$ 250.00$ 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
$\$ \mathbf{5 0 0 . 0 0}$ for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation
$\$ 250.00$ 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 $\qquad$ 365 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.
$\qquad$ YES $\qquad$ NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:
(a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
(b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

| Month of Substantial Completion <br> based on the Base Contract <br> Duration | Number of Days of <br> adjustment |
| :---: | :---: |
| January | 150 |
| February | 120 |
| March | 90 |
| April | 60 |
| May | 30 |
| June | 0 |
| July | 0 |
| August | 0 |
| September | 0 |
| October | 0 |
| November-December 15 | 0 |
| December 16-December 31 | 180 |

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

## (GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

## PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS

Note: All certificate(s) of insurance submitted pursuant to Contract Article 22.3.3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the "Description of Operations" field).

Insurance indicated by a blackened box ( $\mathbf{\square}$ ) or by $X$ in a $\square$ to left will be required under this contract

| Types of Insurance <br> (per Article 22 in its entirety, including listed paragraph) | Minimum Limits and Special Conditions |
| :---: | :---: |
| Commercial General Liability Art. 22.1.1 | The minimum limits shall be $\$ 3,000,000$ per occurrence and $\$ \underline{6,000,000}$ per project aggregate applicable to this Contract. <br> Additional Insureds: <br> 1. City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 2010 and CG 20 37, and <br> 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), <br> 3. New York State, including its officials and employees, <br> 4. Federal Transit Administration, including its officials and employees. |



| $\square$ Builders' Risk | Art. 22.1.4 | $100 \%$ of total value of Work <br> Contractor the Named Insured; the City both an Additional Insured and one of the loss payees as its interests may appear. <br> 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. <br> 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 <br> 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 <br> Additional Insureds: <br> (1) City of New York, including its officials and employees, and <br> (2) New York State, including its officials and employees, and, <br> (3). FTA, including its officials and employees. |

## Project ID.: HWR100PAD

| - Contractors Pollution Liability | Art. 22.1.6 | $\$ 1,000,000$ per occurrence <br> \$ 2,000,000 aggregate <br> Additional Insureds: <br> 1. City of New York, including its officials and employees, and <br> 2. New York State, including its officials and employees <br> 3. FTA, including its officials and employees |
| :---: | :---: | :---: |
| $\square$ Marine Protection and Indemnity | Art. 22.1.7(a) | \$ $\qquad$ each occurrence <br> \$ $\qquad$ aggregate <br> Additional Insureds: <br> 1. City of New York, including its officials and employees, and <br> 2. <br> 3. $\qquad$ $\qquad$ |
| $\square$ Hull and Machinery Insurance | Art. 22.1.7(b) | \$ $\qquad$ per occurrence <br> \$ $\qquad$ aggregate <br> Additional Insureds: <br> 1. City of New York, including its officials and employees, and <br> 2. $\qquad$ <br> 3. $\qquad$ |
| $\square$ Marine Pollution Liability | Art. 22.1.7(c) | \$ $\qquad$ per occurrence <br> \$ $\qquad$ aggregate <br> Additional Insureds: <br> 1. City of New York, including its officials and employees, and <br> 2. $\qquad$ <br> 3. $\qquad$ |
| Standard Construction Contract Schedule A une 2015 | SA-8 |  |

## [OTHER]

Art. 22.1.8
Railroad Protection Liability Policy
(ISO-RIMA or equivalent form) approved by Permittor covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:

- Policy Endorsement CG 2831 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.
- Indicate the Name and address of the Contractor to perform the work, the Contract \# and the name of the railroad property where the work is being performed and the Agency Permit.
- Evidence of Railroad Protective Liability Insurance, must be provided in the form of the Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.
$\$ 2,000,000$ 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.
2. New York State, including its officials and employees,
3. Federal Transit Administration, including its officials and employees.

## Project ID.: HWR100PAD

[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]

- Engineer's Field Office

Section 6.40, Standard Highway Specifications
Art. 22.1.8
Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of $\$ 40,000$

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.

## 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.

## 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]
$\overline{\text { [Name and title of authorized official, broker, or agent (typewritten)] }}$
State of $\qquad$
County of $\qquad$

Sworn to before me this $\qquad$ day of $\qquad$ , 20 $\qquad$
$\qquad$

## 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 shall be sent to the address set forth below or, in the absence of such address, to the Commissioner's address as provided elsewhere in this Contract.
$30-30$ Thomson Avenue, 4th Floor (IDCNY Building)

Long Island City, NY 11101

## R - PAGES

REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS

## NOTICE

THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS, DATED AUGUST 1, 2015, (WHICH INCLUDE, BUT ARE NOT LIMITED TO, "GENERAL CONDITIONS", "BASIC MATERIALS OF CONSTRUCTION", "COMBINED MATERIALS OF CONSTRUCTION", "CONSTRUCTION METHODS", "INSPECTION AND TESTING OF MATERIALS, ADJUSTMENTS FOR DEFICIENCIES, AND MAINTENANCE", AND "SUPPLEMENTAL CONSTRUCTION METHODS"), AS REVISED HEREIN (R-PAGES) AND BY ADDENDA ISSUED PRIOR TO THE OPENING OF BIDS, SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

ALL REFERENCES CONTAINED HEREIN (R-PAGES) ARE TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION, STANDARD HIGHWAY SPECIFICATIONS, DATED AUGUST 1, 2015. SAID STANDARD HIGHWAY SPECIFICATIONS ARE HEREBY REVISED UNDER THE FOLLOWING REVISIONS:

1. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME I
2. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME II
3. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME I

The following amendments to the Contract Requirements shall become a part of and apply to the contract:
2. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME II
(NO TEXT)

## NEW SECTIONS

## NOTICE

the pages contained herein are new section of work that SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.
UNLESS OTHERWISE SPECIFIED, ALL SECTIONS, SUBSECTIONS, ARTICLES, AND SUBARTICLES AS REFERRED TO HEREIN (I-PAGES) ARE TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S (NYC DOT'S) STANDARD HIGHWAY SPECIFICATIONS DATED AUGUST 1, 2015 AS CURRENTLY AMENDED BY THE R-PAGES.

## TABLE OF CONTENTS

| SECTION | DESCRIPTION | PAGE NO. |
| :--- | :--- | :---: |
| 4.05 R | REUSABLE PRECAST CONCRETE PAVEMENT SLABS | $\mathrm{I}-1$ |
| 4.05 S | ISOLATION SLAB | $\mathrm{I}-8$ |
| 8.32 | BARK CHIP MULCH | $\mathrm{I}-10$ |
| 6.52 FED | UNIFORMED FLAGPERSON | $\mathrm{I}-11$ |

Project ID. HWR100PAD
(NO TEXT ON THIS PAGE)

## SECTION 4.05 R

## Reusable Precast Concrete Pavement Slabs

4.05R.1. INTENT. This section describes construction of Reusable Precast Concrete Pavement Slabs. 4.05R.2. DESCRIPTION. This work shall consist of furnishing and installing reusable precast reinforced concrete pavement slabs, including, but not limited to, furnishing, installing and fine grading of slab support material; furnishing and placement of reusable precast concrete pavement slabs; furnishing and installation of dowel bars used to join new precast slabs to new precast slabs, isolation slabs and existing pavement by any method used; installing pavement hardware backfill material, furnishing and installing bedding material of any type; and all other work necessary as shown on the Contract Drawings or as directed by the Engineer and as set forth in this specification to complete the reusable precast concrete pavement installation not covered by other bid items shown in the Contract Drawings.

### 4.05R.3. DEFINITIONS .

(A) SYSTEM. The term "system" refers to specific precast slab details integrated with a specific method for providing grade control for the slabs, a method of assuring full and complete bedding under the slabs, a method of achieving load transfer between slabs and a "System Designer" employed by the Contractor who is responsible for coordinating specific fabrication and installation techniques to ensure slabs are fabricated and placed in accordance with the Contract Drawings and specifications.
(B) SYSTEM DESIGNER. The term "System Designer" refers to the proprietor and/or proprietor-authorized representative of the system.

### 4.05R.4. SUBMITTALS .

## (A) FABRICATOR WORKING DRAWINGS

Submit a proposed slab and joint layout drawing along with detailed Fabricator and Installation working Drawings that include the following information:

1) Length and width dimensions for each slab that ensures they fit between existing longitudinal and new transverse joints
2) Reinforcing details
3) Edge of slab and surface finish details
4) Planarity of surface of each slab
5) Mark number for each slab
6) For multiple and continuous slab installations, develop an overall slab layout drawing showing the Mark Number for each slab.
4.05R.5. MATERIALS.
(A) The precast slab system selected shall appear on the New York State Department of Transportation's Approved List entitled "Precast Concrete Pavement Slab System (704-15)"; shall have additionally been demonstrated to be removable, slab by slab, and reusable in the same location; and, each slab shall be precast in accordance with the System Designer's approved Fabrication and Installation
sheets.
(B) Removable pavement dowels shall be removable high performance hollow stainless steel dowels (Super-Dowels) as manufactured by The Fort Miller Co., Inc., or as otherwise recommended by the System Designer, that can be removed from previously installed precast slabs such that the slabs are not damaged and that new dowels can be installed in the same locations.
(C) All other materials required for installation of the reusable precast concrete pavement slabs shall be as approved by the Engineer, in consultation with the Contractor's System Designer.

### 4.05R.5. METHODS.

## (A) PRE-FABRICATION MEETING

Convene a Pre-Fabrication meeting at a mutually agreed time and location prior to development of detailed shop drawings to discuss methods of accomplishing all phases of the work. The meeting shall be attended by the System Designer's representative and/or design engineer, the prethe meeting. precast slabs. The Engineer will preside over

## (B) DESIGN

Slabs shall be designed geometrically to meet the thickness, width, length and cross slope requirements shown on the Contract Drawings and as required to meet job site conditions. Take field measurements between existing longitudinal joints and if needed, perform a detailed " $x$ ", " $y$ ", and " $z$ " survey of abutting pavement surfaces, prior to fabricator shop drawing preparation. Use this information, in addition to horizontal and vertical alignment information shown on the Contract Drawings, to develop a detailed slab layout drawing and detailed fabricator shop drawings for each slab. When non-planar and/or non-rectangular slabs are required,
provide three-dimensional values for each corner of every slab in addition to the length and width dimensions required for all slabs. Ensure slab corners and surfaces meet all vertical and horizontal parameters shown on the Contract Drawings. Stability and handling stress calculations must be provided for lifting and transporting as per Precast Prestressed Concrete Institute (PCI).

Align joints both transversely and longitudinally between new abutting precast slabs, i.e., do not stagger joints, except where approved on the joint layout drawing. Transverse joints between new precast slabs need not be aligned with transverse joints in existing pavement. If new precast slabs are tied to adjacent existing pavement, do not drill and anchor longitudinal joint ties within 24 inches of any transverse joint in adjacent lanes and do not tie any new precast slab to more than one adjacent existing or new slab.

## (C) PRE-INSTALLATION MEETING

Hold a Pre-Installation Meeting within one (1) week prior to the planned start of slab installation. The meeting shall be attended by the Engineer, the Contractor's personnel, grout installers, and the System Designer's Technical Representative. The complete installation process and equipment used to perform the work will be reviewed and agreed upon by everyone present.

## (D) TECHNICAL ASSISTANCE

Since installation techniques and details are specific to each system, the System Designer shall provide training to installation personnel and to the Engineer or his representative at least one week prior to commencement of installation. The System Designer shall also provide onsite technical assistance and training during the first three days of installation and until the Engineer determines the assistance is no longer required. Training shall be based upon the Installation Instructions developed by the System Designer in accordance with the latest requirements of the New York State Department of Transportation, Standard Specifications for Construction and Materials §704-15, "Precast Concrete Pavement Slab Systems".

## (E) INSTALLATION

Install the precast slabs using installers trained and certified by the System Designer. Installers shall be in possession of a certificate issued by the System Designer that documents successful completion of the System Designer's installation course. Ensure at least one certificatebearing installer is present at all times during installation who is directly controlling the following:

1) taking field measurements of existing repair locations for purposes of developing detailed shop drawings;
2) laying out saw cuts for the new slabs;
3) sawing, cutting and removing existing pavement;
4) furnishing, installing, compacting, and grading a bedding material layer for the purpose of providing grade control and support for the slabs or positioning the slab prior to installation of bedding material under the slab, as specified in the System Designer's installation instructions;
5) laying out panel point marks to ensure proper slab positioning;
6) placement of the new slabs;
7) installation of the dowel grout and bedding material.
(F) REMOVAL OF EXISTING PAVEMENT

Remove existing pavement full depth to be paid under Item No. 6.02 AAN, as detailed in the Contract Drawings and specifications. Lay out saw cut lines with the necessary degree of accuracy to ensure transverse joints are straight and located as shown on the Contract Drawings and so transverse joint widths do no exceed $1 / 2$ inch. If the last slab placed in any given shift is not the last slab in the run, provide a saw cut that allows for a temporary slab to be placed over the protruding dowels such that the transverse joint width at the end of the run does not exceed $2^{\prime \prime}$ inches. Fill over-width joints with bituminous patching material, as directed by the Engineer, to maintain daytime traffic. Remove pavement with equipment approved by the Engineer in a manner that does not damage the existing pavement.
(G)

SUBGRADE PREPARATION
Fully compact, and grade when necessary, any disturbed existing subbase material to be left in place. For new construction, apply New York State Department of Transportation, Standard Specifications for Construction and Materials, Section 304, Subbase Course and bring the subbase course to a level that allows room for any bedding material as required by the System Designer in accordance with the Contract Documents.

## (H) BED AND LEVEL SLABS

If granular bedding material is used as grade control for the slabs, install, grade and compact bedding material in accordance with the System Designer's instructions such that the vertical differential between
adjacent precast slabs across any joint is $1 / 4$ inch or less. Make a minimum of three passes with a vibratory roller or plate compaction to achieve full compaction. Fine grade the bedding layer to achieve maximum uniform support. Do not disturb the prepared surface before installation.

If a material other than granular bedding material is used to provide grade control and to support and bed the slabs, follow the system Designer's installation instructions to finally ensure the slabs are brought to grade, and fully bedded and supported.

## (I) SLAB INSTALLATION

Transport, handle and install the slabs in accordance with the System Designer's instructions in the locations shown on the slab layout drawing.

For single panel installations, center the new panel in the pre-measured sawcut void.

For multiple-panel installations, mark out the leading edges of all slabs to ensure proper placement and fit prior to placement of any slabs. The marks shall account for proper joint widths as indicated on the slab layout drawing.

Prior to placement of each slab, apply bond breaker to dowels embedded in existing pavement or in previously-placed precast slabs. Apply bond breaker to the edges of existing pavement and new precast slabs as indicated on the Contract Drawings.

Place panels such that the width of transverse joints are $1 / 2$-inch or less, and the longitudinal joints $3 / 4$-inch or less. Check the vertical surface match between the new panels to ensure they are within plus or minus $1 / 8$-inch or less. If the surface match exceeds this tolerance, remove the panel and regrade and recompact the bedding material or otherwise adjust the slab such that the required surface tolerance is met.

## (J) BACKFILL PAVEMENT HARDWARE

Backfill around pavement hardware in accordance with the System Designer's instructions.

INSTALL BEDDING GROUT
Install bedding grout under previously-placed slabs in accordance with the System Designer's instructions.
(L) FILLING OF GROUT PORTS, SLOTS AND LIFTING INSERT RECESSES

Fill all grout ports, slots and lifting insert recesses with freeze-thaw durable pavement hardware grout. Remove bedding grout from the top two inches of bedding grout ports before it fully hardens and install pavement hardware grout. Finish grout to match the finish of the surrounding precast slab.

## (M) OPENING TO TRAFFIC

Precast slabs may be opened to traffic as long as they have been placed upon fully compacted and adequately-graded bedding material or grout or as long as they are fully supported by injected grout material or urethane foam, as demonstrated in the installation training.

If precast slabs are opened to traffic prior to installation of backfill material around the pavement hardware, place shims in joints or take other measures to ensure adjacent slabs do not touch under traffic conditions. Install pavement hardware grout and auxiliary bedding grout within three day of opening slabs to traffic. Remove and re-install any precast slabs having a vertical differential greater than $1 / 4$-inch across any joint prior to final installation of pavement hardware or auxiliary bedding grout.

## (N) DAMAGED OR DEFECTIVE CONCRETE

Apply the latest requirements of the New York State Department of Transportation, Standard Specifications for Construction and Materials, Subsection §502-3.14, Damaged or Defective Concrete.
(O) SMOOTHNESS (Pavements Remaining Concrete Surfaced)

Apply the latest requirements of the New York State Department of Transportation, Standard Specifications for Construction and Materials, \$502-3.15, Hardened Surface Test, for nonprofilographed pavement or §5023.16, Profilograph, for profilographed pavement.
4.05R.6. MEASUREMENT. The work will be measured for payment as the number of cubic yards of Reusable Precast Concrete Pavement Slabs installed to the satisfaction of the Engineer, measured to the nearest 0.1 cubic yards.
4.05R.7. PRICE TO COVER. The contract price bid per cubic yard for Reusable Precast Concrete Pavement Slabs shall include the cost of all labor, materials, equipment, insurance, and other incidentals necessary to satisfactorily perform the work, including, but not limited to, providing technical assistance from the System Designer, to complete the work; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Project ID. HWR100PAD

Payment will be made under:
Item No.
4.05 R

REUSABLE PRECAST CONCRETE PAVEMENT SLAB

Pay Unit<br>CUBIC YARD

SECTION 4.05 S
Isolation Slab
4.05S.1. DESCRIPTION. Isolation Slabs shall be Type 2 reinforced concrete pavement in compliance with the requirements of section 4.05 in the NYC Department of Transportation (NYCDOT) Standard Highway Specifications and shall be constructed to the dimensions and at the locations shown on the Contract Drawings and where directed by the Engineer.
4.05S.2. MATERIALS AND METHODS. All materials and methods shall be done in accordance with the applicable requirements of section 4.05 and Section 4.05 R herein this I-Pages, except that the isolation slabs shall be constructed after the surrounding precast concrete pavement slabs are in their final installed position in order to form the cast-in-place panel around utility castings. Shape of the isolation slab and its construction shall be as shown on the Contract Drawings.
4.05s.3. MEASUREMENT. The quantity to be measured for payment shall be the number of cubic yards of Isolation slab constructed, measured in place, adjusted for thickness and strength deficiencies in accordance with Section 5.04 in the NYCDOT Standard Highway Specifications.

In the determining the quantity of pavement to be paid for, the areas occupied by manhole heads, gate boxes, road boxes, and similar structures will be deducted when they measure more than one (1) square foot and will not be deducted when they measure one (1) square foot or less.
4.05S.4. PRICE TO COVER. The contract price per cubic yard for Isolation Slab shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to furnish and lay the pavement complete in place in full compliance with the requirements of the specifications, including, but not limited to: furnishing and installing steel reinforcement, removable pavement dowels and all other steel bars requiredi preparation and submission of shop drawings and concrete mix design criteria; supports, forms, joint filler and joint sealer; curing; repairs to and replacement of damaged and defective pavement; saw cutting joints; damping of the subgrade; to furnish such samples and cores for testing and to maintain the pavement in good condition as specified in section 5.05 in the NYCDOT Standard Highway

## Project ID. HWR100PAD

Specifications; and completing the work in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Pay Unit
Item No. Item
4.05 S ISOLATION SLAB
C.Y.

## SECTION 8.32

## Bark Chip Mulch

8.32.1. DESCRIPTION. Under this section, the Contractor shall furnish and place Bark Chip Mulch in accordance with the plans and specifications and as directed by the Engineer.
8.32.2. MATERIIAL. Bark Chip Mulch shall be a natural forest product of $98 \%$ bark containing less than $2 \%$ wood or other debris. It shall be of white or Red Fir and/or Pine bark of a uniform grade with no additives or any other treatment. Size of bark shall be from $5 / 8^{\prime \prime}$ to $1-1 / 4$ ". The ph factor should range from 5.8 to 6.2.
8.32.3. METHODS. Bark Chip Mulch shall be applied where required on the plans or directed by Engineer as a ground cover to the surface of beds and tree pits after the planting is completed. Mulch shall be applied to a uniform depth of three inches ( 3 ") and shall be so distributed as to create a smooth, level cover over the exposed soil. Plants shall not be covered.
8.32.4. MEASUREMENT. The quantity of Bark Chip Mulch to be paid for will be the number of square yards of ground surface area that has been satisfactorily covered with bark chip mulch within limits of enlarged tree pits surrounding existing trees as indicated on the plans and where directed by the Engineer.
8.32.5. PRICE TO COVER. The unit price bid per square yard for Bark Chip Mulch shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to complete the work under this section in accordance with the plans, the specifications and the directions of the Engineer.

No payment will be made under this item for furnishing and placing mulch in tree pits around newly planted or transplanted trees.

Payment will be made under:

Item No. Item
Pay Unit

## SECTION 6.52 FED Uniformed Flagperson

6.52FED.1. INTENT. This section describes the employment of uniformed flagpersons to direct and detour traffic.
6.52FED.2. DESCRIPTION. The Contractor shall furnish an adequate number of flagpersons to control vehicular and pedestrian traffic when it is necessary to maintain alternating one-way traffic in one lane of a two-way roadway, and at all other locations where construction operations, construction vehicles and equipment, and temporary traffic patterns related to the construction operations require positive temporary traffic control for safe, efficient traffic operations.
6.52FED.3. METHODS. All flagpersons shall be English speaking and adequately trained in flagging operations by a recognized training program such as that provided by the American Traffic Safety Services Association, the National Safety Council, unions or construction industry associations, or by an individual who holds a current certification as a flagger training instructor from such a program.

All flagpersons, their apparel, hand-signaling devices, active two-way radios, and procedures to be used by them shall be in compliance with the requirements of Chapter 6E. FLAGGER CONTROL, in the Federal "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009 Edition, or later edition.

Prior to the start of flagging operations, the Contractor shall provide to the Engineer a list of certified flagpersons to be used in the contract, identifying the source of flagger training for each individual. When requested by the Engineer, flagpersons shall demonstrate their competency in flagging procedures. Flagpersons not competent in flagging procedures to the satisfaction of the Engineer shall be retrained or replaced at once.

Flagpersons are to be paid not less than the most recent prevailing wages rates established for Laborers as set by the NYC Comptroller or the US Department of Labor, whichever is higher at the time the work is being performed.

The Contractor will be given a minimum of 12 hours advanced notice by the Engineer as to when to furnish a flagperson.
6.52FED.4. METHOD OF MEASUREMENT. The fixed price lump sum shown in the bid proposal for this item shall be considered the price bid, although actual payment will be based on the authorized work performed by the Uniformed Flagpersons. The fixed sum is not to be altered in any manner by the bidder.

It is agreed that the quantity to be measured for payment shall be the number of person-hours of uniformed flagperson service actually performed, as authorized by the Engineer.

Laborers who are not uniformed flagperson will not be measured for payment as flagperson under this item.
6.52FED.5. BASIS OF PAYMENT. The Contract price for this item shall be a lump sum price for the work performed under this item and shall be equal to the total sum of the amount of wages paid for all authorized Uniformed Flagpersons performing vehicular and pedestrian traffic management, with a twelve (12\%) percent markup 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; plus ten (10\%) 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; as described in Article 26 of the Standard Construction Contract.

Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, and all material costs for their apparel, hand-signaling devices, active two-
way radios, and any other equipment required, and insurance required by Schedule $A$ of the General Conditions other than Workers' Compenstation Insurance.
The hourly rate per person-hour shall be the prevailing wage rate for Laborers in effect at the time of the work to control and detour traffic, as shown on the Contract Drawings or as directed by the Engineer.

The Contactor shall be required to submit to the Engineer satisfactory evidence of payment on a New York State certified payroll report forms. No retainage will be withheld by the Department on such payments made under this section.

The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule. No guarantee is given that the actual total cost for this item will in fact be the "fixed sum" amount. The "fixed sum" amount is included in the total bid solely to insure that sufficient monies will be available to pay the Contractor for these services.

The "fixed sum" is for bidding purposes only and shall not be varied in the bid. The Contractor will be paid for the actual amount regardless of the fixed sum, which may be more or less than the fixed sum amount.

The Contractor shall maintain separate books of accounts and shall not charge any portion of the cost of wages for Uniformed Flagpersons to another part of the work. Payment and partial payments under this item shall be treated separately from the rest of the contract items.

The New York State certified payroll report forms shall be submitted to the Engineer on a monthly basis and shall include the signed copies of the daily report.

Payment will be made under:

| Item No. Item | Pay Unit |  |
| :--- | :--- | ---: |
| 6.52 FED | UNIFORMED FLAGPERSON | FIXED SUM |

## SPECIAL PROVISIONS

## NOTICE

THE PAGES CONTAINED HEREIN (S-PAGES) ARE SPECIAL PROVISIONS THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.
(NO TEXT ON THIS PAGE)

## TABLE OF CONTENTS

ARTICLE DESCRIPTION
A. LINES AND GRADESPAGE NO.
B. SPECIFIC TRAFFIC STIPULATIONS ..... S-1
C. HOLIDAY CONSTRUCTION EMBARGO ..... S-1
D. DISPOSAL OF EXCESS EXCAVATED MATERIAL ..... S-2
E. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK ..... S-2
F. NOISE CONTROL ..... S-2
G. SCHEDULE OF WORK ..... S-10
H. SCHEDULING PRESENTATION ..... S-11
I. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES ..... S-11
J. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN ..... S-11
K. PRIVATE UTILITY HARDWARE ADJUSTMENTS ..... S-11
L. SURVEY MONUMENTS ..... S-11
M. RESTORATION OF ADJACENT AREAS ..... S-12
N. THE CONTRACTOR IS NOTIFIED ..... S-12
O. THE CONTRACTOR IS NOTIFIED ..... S-12
P. START OF CONTRACT WORK ..... S-12
Q. PRICES TO INCLUDE ..... S-12
OCMC TRAFFIC STIPULATIONS ..... S-13
INTERPRETIVE MEMORANDUM \# 2 ..... S-18
(NO TEXT ON THIS PAGE)

## SPECIAL PROVISIONS

A. LINES AND GRADES. The Contractor shall furnish lines and grades in accordance with Section 1.06 .27 of the Standard Specifications, except that survey controls established for this project may no longer exist and the Contractor shall be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor shall check with Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.
B. SPECIFIC TRAFFIC STIPULATIONS. Under this contract, the Contractor shall 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, 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 shall be final.

In addition, the cost of compliance with requirements of the OCMC Traffic Stipulations, unless otherwise provided for, shall be deemed included in the prices bid for all scheduled items.
C. HOLIDAY CONSTRUCTION EMBARGO. A special Holiday Construction Embargo shall be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below which do not already have the permit stipulation " 410 " are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers are not required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at: http: //www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf

## * 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

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.
D. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, shall become the property of the Contractor and shall be properly disposed of away from the site, at the Contractor's expense. Contaminated material shall be disposed of separately in accordance with contract requirements.
E. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK. The following shall pertain to all contract items that have backfill as a part of their work: Backfilling shall 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.
F. NOISE CONTROL. The Contractor is directed to Title 24, Chapter 2 of the Administration Code of the City of New York, known as the "New York City Noise Code" by the Department of Environmental Protection. The provisions of this code and its most recent additions and revisions shall apply to this contract. In the event of a conflict between the requirements of the New York City Noise Code and the requirements of Noise Control contained in these special notes, the more stringent of the two shall apply.

The Contractor shall plan and carry out work on this Project to ensure that the noise from construction equipment and activities does not exceed the limits specified herein. The noise abatement operations and conditions specified shall be carried out by the contractor to limit noise in project and adjacent areas. The Contractor shall conduct a continuous educational effort for the
workers on the site to ensure that they are aware of their roles in minimizing noise propagating from the site.

In order to monitor noise abatement operations the Contractor shall employ services of "Noise Control Specialist" for the duration of construction activity. The contractor shall submit qualifications and experience of the prospective specialist/firm to the Engineer for prior approval. The specialist/firm must satisfy the eligibility requirements of qualifications and work experience as required by the N.Y.C.D.E.P.

The monitoring protocol shall be as follows:
(a) There shall be one outdoor and one indoor monitoring station for each work area or $1,000 \mathrm{ft}$. of street length whichever is less.
(b) Monitoring of noise level shall be done prior to start of construction and during construction for each station at the same work hours specified in the contract.
(c) Locations of monitoring stations shall be recommended by the noise control specialist for approval of the Engineer.
(d) Engineer shall provide indoor station locations to the contractor after ascertaining availability of the said station from the Community Board.

Should the Contractor fail to carry out the noise abatement operations and conditions specified herein, the Engineer shall have the authority to suspend all work until such time as the Engineer deems that the Contractor has complied with the requirements.

The following additional requirements for noise control shall apply to this contract:

1. Noise Level Requirements for Construction Equipment
(a) The Contractor shall ensure that all Contractor and Subcontractor equipment, of the types listed in Table $A$ to be used on-site for a total duration greater than 5 days, shall be tested for compliance with the stated noise emission limits during the first day of use on the construction site or at an alternative site acceptable to the Engineer.
(b) All equipment as described in (a) above shall be re-tested at 6 month intervals while in use on site.
(c) All compliance tests shall be performed by the Contractor.
(d) For each piece of equipment tested, the Contractor shall provide a noise report to the Engineer as shown in Figure A.
(e) Equipment of the types listed in Table A, as described above, shall not be used on-site without valid certificates of noise
compliance.
(f) The Contractor shall provide to the Engineer two noise meters meeting the requirements of section $2(d)$ herein. Two acoustic calibrators of the type recommended by the meter manufacturer shall also be provided.

## TABLE A

CONSTRUCTION EQUIPMENT NOISE EMISSION LIMITS: MEASURED AT 50 FEET FROM CONSTRUCTION EQUIPMENT

## Equipment Category <br> Noise Level, dBA(SLOW)

Auger ..... 83
Backhoe ..... 80
Bar Bender ..... 80
Cherry Picker ..... 80
Chain Saw ..... 86
Compactor ..... 80
Compressor ..... 70
Concrete Mixer ..... 86
Concrete Pump ..... 82
Concrete or Diamond Saw ..... 90
Crane ..... 86
Crawler Miller ..... 90
Dozer ..... 86
Front End Loader ..... 80
Generator ..... 82
Gradall ..... 86
Grader ..... 86
Jackhammer ..... 88
Man Lift ..... 80
Mounted Impact Hammer ..... 95
Paver ..... 86
Pneumatic Tools ..... 86
Roller ..... 80
Scraper ..... 86
Shotcrete Liner (tire-mounted) ..... 79
Striper (walk-behind) ..... 80
Tractor ..... 84
Traffic Line Remover ..... 80
Truck (including truck-mounted equipment) ..... 84
Vibrator ..... 80
Vibratory Pile Driver ..... 95
All Other Equipment with Engines
Larger than 3750W ..... 86
Impact Pile Driver ..... $105 \mathrm{dBC}(\mathrm{FAST})$

## FIGURE A

## CERTIFICATE OF EQUIPMENT NOISE COMPLIANCE

Contractor Name:
Contract Name \& Number: $\qquad$
Equipment Type:
Manufacturer \& Model Number:
Identification Number:
Rated Power \& Capacity:
Operating Condition During Test: $\qquad$
Measured Sound Levels at 6 to 15 meters:
Measured Values and Distance:
Engine-Powered or Concrete-Breaking Equipment: Right Side: $\qquad$ dBA (SLOW) , at $\qquad$ meters Left Side:
Impact Pile Driving Equipment: Right Side: Left Side: $\qquad$ dBC(FAST), at $\qquad$ meters
$\qquad$ dBC(FAST), at $\qquad$ meters

Equivalent Values at 50 Feet Distance:
Engine-Powered or Concrete-Breaking Equipment:
Right Side: dBA (SLOW) . Left Side:
$\qquad$ dBA (SLOW) .
Impact Pile Driving Equipment:
Right Side: $\qquad$ $d B C(F A S T)$. Left Side: $\qquad$ dBC (FAST).

Maximum Values Allowed for this Equipment: $\qquad$ dBA(SLOW) at 15 meters dBC(FAST) at 15 meters

If equipment sound level exceeds maximum value allowed, indicate action taken to achieve compliance:

Name, Work Address \& Phone No. of NYSDOT Inspector

Authorized Signature: $\qquad$ Date: $\qquad$
$\qquad$ Date: $\qquad$
2. Noise Level Test Procedures of Construction Equipment
(a) All engine-powered equipment shall be operated by the Contractor or Contractor's representative at high idle (maximum governed rpm) under full load conditions during the tests.
(b) Portable and mounted impact hammers, such as hoe rams and jackhammers to be used to concrete breaking, shall be tested during the first day of actual operation at the construction site under maximum load conditions as rated by the equipment manufacturer.
(c) Pile driving equipment shall be tested at the construction site under maximum load conditions as rated by the manufacturer.
(d) All noise certification measurements shall be performed with an instrument that is in compliance with the criteria for a Type 1 (Precision) or Type 2 (General Purpose) Sound Level Meter as defined in the current revision of ANSI Standard S1.4. An acoustic calibrator of the type recommended by the sound level meter manufacturer shall be used prior to all measurements.
(e) If possible, measurements shall be made at 50 feet ( $\pm 1.5$ feet) from the right and left sides of the equipment casing, at a height of 5 feet above ground level, with the equipment operating as indicated in items (a), (b) or (c) above for a minimum period of 1 minute. Measurements made at less than 50 feet, because of space limitations at the test site, shall be reduced by the values given in Table $B$ to estimate the 50feet sound level.

TABLE B
ADJUSTMENTS FOR CLOSE-IN EQUIPMENT NOISE MEASUREMENTS
Measurement Values to be Subtracted from Measured Sound Level Distance (Feet) to Estimate Sound Level at 50 Feet (dBA)



```
2 3 \text { to under 26 6}
2 6 \text { to under 29 5}
2 9 ~ t o ~ u n d e r ~ 3 3 ~ 4 ~ 4
33 to under 37 3
3 7 \text { to under 41 2}
4 1 ~ t o ~ u n d e r ~ 4 7 ~ 1 ~
4 7 \text { to under 50 0}
```

3. Compliance with Equipment Noise Level Requirements
(a) The Engineer shall retain a copy of the noise report from the Contractor with each piece of equipment used on the project of the types listed in Table A. The report shall be on the form shown in Figure A with certification by the noise control specialist hired by the contractor that equipment noise emissions do not exceed those prescribed.
(b) If the noise levels obtained during the tests exceed those specified in Table A the Contractor shall promptly modify or alter such equipment and retest, or substitute other equipment to meet the noise level requirements.
(c) Upon compliance, (including the certification date and equipment identification number) the Engineer will keep the noise reports readily available on file in the Construction field office for inspection upon request.
(d) The Certification of Noise Compliance will remain valid for a period of 6 months only. Delays caused by certification refusal or by time lost in improving the rejected equipment or finding alternate acceptable equipment shall not be a basis for any monetary or time delay claims or for avoidance of late completion penalties.
(e) All equipment shall be subject to spot noise level testing by the Engineer at his discretion as necessary to determine that the equipment in use meets the requirements specified in Table A. For this purpose, the Contractor shall furnish noisemeasurement instrumentation that complies with the standards specified in paragraph 2. (d). If such tests are requested by the Engineer, the Contractor shall locate and operate the equipment as directed by the Engineer so as to facilitate the measurements. The Engineer shall provide the Contractor with a copy of the results of the measurements. If such tests demonstrate that any equipment does not comply with the requirements specified in Table A, its Certificate of Noise Compliance shall be revoke and equipment shall be taken out of use until compliance is achieved. A new Certificate of Noise Compliance will then be issued.

## 4. Construction Noise Level Exposure Limits

(a) In no case shall the public be exposed to construction noise levels exceeding 100 dBA (SLOW) or to impulsive noise levels exceeding 125 dBC (FAST).
(b) Construction activities shall be conducted in such a manner that the equivalent noise level (Leq) over any one-hour period does not exceed 85 dBA at any noise-sensitive locations (e.g. residence and hotels).
5. Construction Noise Level Exposure Test Procedures
(a) All noise exposure measurements will be performed with an integrating sound level meter. An acoustic calibrator will be used prior to all measurements.
(b) The measurement microphone of the sound level meter shall be fitted with an appropriate windscreen, and will be located 1.5 meters above the ground and at least 5 feet away from the nearest sound-reflective surface for the tests.
(c) Noise exposure measurements will be taken at noise-sensitive locations closest to the construction activities at least once each week and as dictated by construction activities. Measurement periods at each location shall be a minimum of one hour.
(d) Construction noise exposure measurements will coincide with periods of maximum noise-generating construction activity, and will be performed during the construction phase or activity that the greatest potential to create annoyance or to exceed the noise exposure limits.
6. Compliance with Construction Noise Level Exposure Limits
(a) Construction noise exposure data will be collected by the Contractor on a weekly basis. The noise report will include (1) a sketch indicating the locations of the measurements and of all nearby construction equipment operating during the measurement period, (2) the measured maximum A-weighted noise level at each location, in terms of dBA (SLOW), (3) the measured maximum $C$-weighted noise level, in terms of $d B C$ (FAST) and (4) the measured one-hour Leq (in dBA).
(b) In the event that the measured noise levels exceed the limits specified in paragraph 4 above, the Engineer will immediately notify the Contractor and the Contractor shall implement corrective actions as directed by the Engineer.
(c) All construction activities will be subject to spot noise level testing by the Engineer at his discretion as necessary to determine that the noise levels meet the exposure limits specified in paragraph 4 above. If such tests demonstrate that the noise levels exceed the specified limits, the Contractor shall implement corrective actions as directed by the Engineer.
7. General Requirements for Construction Equipment Noise Control
(a) The Contractor shall minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, concrete crushers or pavement saws shall be used
rather than hoe rams for tasks such as grillage removal and pavement demolition.
(b) All pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise ordinance limitations.
(c) All impact devices (i.e. jackhammers and pavement breakers) shall be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof, to meet relevant noise ordinance limitations.
(d) Hoppers, conveyors transfer points, storage bins, and chutes shall be line or covered with sound-deadening material.
(e) The Contractor shall minimize the use of air or gasolinedriven hand tools.
(f) All other equipment, including internal combustion engines, shall have mufflers and shield paneling recommended by the manufacturers thereof.
8. General Operational Requirements for Construction Noise Control
(a) The Contractor shall operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises, especially near noise-sensitive locations.
(b) The Contractor, to the extent feasible, shall configure the construction site in a manner that keeps noisier equipment and activities as far as possible from noise-sensitive locations and nearby buildings.
(c) The Contractor shall minimize noise from the use of backup alarms near residential buildings by using self-adjusting, ambient noise-sensitive backup alarms that meet OSHA regulations.
(d) In no case shall the above restrictions limit the Contractor's responsibility for compliance with all applicable Federal, state and local safety ordinances and regulations and other sections of these construction specifications.
9. Acoustic Shed Requirements
(a) All noise-generating mechanical equipment that is operated by the Contractor at any time other than weekdays between the hours of 7:00 a.m. and 6:00 p.m. shall be enclosed within an acoustic shed. Such equipment includes, but is not limited to, generators for traffic sign boards and lighting.
(b) Acoustic sheds shall consist of three-sided, closed-top enclosures, oriented such that the open end of the shed faces away from residential or hotel buildings.
(c) The shed shall be constructed of 0.5 inch plywood sheeting, or other acceptable material weighing at least 1.5 pounds per square foot, on timber framing with no gaps at joints or corners. Gaps between the bottom edge of the shed panels and the ground shall not exceed 1 inch in width and shall be closed off with solid strips of rubber, neoprene or other suitably dense material.
(d) The inside of the shed shall be lined with glass fiber or mineral wool type sound-absorbing material at least 2 inches thick, protected by wire mesh or perforated sheets that have at least 30 percent open area.
10. Cost of Work
(a) The cost of all labor, materials, equipment, insurance necessary for noise abatement measures as described in this section, any necessary modifications of construction methods or equipment and any delays to construction due to work suspension due to non-compliance with noise control requirements or due to necessary modifications to construction methods for compliance with the noise control requirements is deemed included in the prices bid for the items of work for which the equipment is used.
G. SCHEDULE OF WORK. The Contractor shall be required to prepare a progress schedule, in accordance with the requirements of Article 9 of the Standard Construction Contract, based on simultaneously working at multiple locations using multiple crews during the construction of the contract, as approved by the Engineer.

Each work force crew shall be defined as a sufficient number of workers with support staff and equipment necessary to perform the work efficiently as directed by the Engineer. Where the Contractor can demonstrate to the Engineer that he has substantially completed work, he may be permitted to start work at additional locations, on a one to one basis, at the sole discretion of the Engineer.

Where the Contractor's work operations are not able to meet its approved progress schedule, the Engineer may order the Contractor to provide additional work force as may be necessary. Failure to comply with such orders within seven (7) calendar days after the written notice from the Engineer may result in the Contractor being declared in default of the Contract in accordance with the procedure contained in Article 48 of the Standard Construction Contract.
H. SCHEDULING PRESENTATION. The Contractor shall submit construction schedule in the form of a bar chart using "Microsoft Project 2010", or in an approved equivalent program which shall be
directly and fully translatable into Microsoft Project 2010 format, within seven days of the initial Pre-Construction Meeting. Each bar in the chart shall show dates the Contractor plans to start and complete each construction activity after the initial Pre-Construction Meeting. Bar chart shall show the order and interdependence of all activities necessary to complete the work and the sequence in which activity is to be accomplished as planned by the contractor and in accordance with all subcontractors or suppliers whose work shall be shown on the bar chart. The Contractor shall submit the bar chart for the Engineer's review and revise it, if required, until approved by the Engineer.

The Contractor shall submit weekly progress status update reports or as otherwise directed by the Engineer. The Contractor shall submit updated bar chart every month. The revised bar chart shall be made in the same form and detail as the original submittal and shall be accompanied by an explanation of the reasons for the revisions all of which shall be subject to approval by the Engineer.
I. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES. Contractor shall plan and/or stage it work schedule using all hours/days available. Contractor is advised that all applicable unit prices shall 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 shall be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes shall be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications and the above "SCHEDULING PRESENTATION" Article, and shall be submitted for approval of the Engineer.
J. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN. Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of December 1st through April 1st, the Contractor will NOT be granted an extension of time for completion of this contract due to the winter shut-down period, unless otherwise provided in Schedule A.
K. PRIVATE UTILITY HARDWARE ADJUSTMENTS will be performed by the owning utility company or its agent, at its expense. The Contractor shall notify the utility company 72 hours prior to start of work at each location where its hardware requires adjustment.
L. SURVEY MONUMENTS. When working in the vicinity of survey monument the Contractor shall hand excavate per Item 8.02 A and 8.02 B at City Survey Monuments, for a distance of five (5) feet around each monument, as directed by the Engineer.
M. RESTORATION OF ADJACENT AREAS. The Contractor shall be required to remove all form work. In planting strip areas, the Contractor shall be required to restore areas damaged as a result of his operations, to the satisfaction of the Engineer, with sod. The Contractor shall also, as directed by the Engineer, make safe adjacent areas to his 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 asphaltic concrete mixture (Item 4.02 CB ) 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 shall be done to the satisfaction of the Engineer.
N. THE CONTRACTOR IS NOTIFIED that for use of City water under this project the Contractor shall be required to obtain a water use permit from the Department of Environmental Protection at the Contractor's own cost.
O. 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 USEIApublished 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 $1^{\text {st }}$, April $1^{\text {st }}$, July $1^{\text {st }}$ and September $1^{\text {st }}$ ) 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.
P. START OF CONTRACT WORK. The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within 21 to 30 Days of Contract Registration.
Q. PRICES TO INCLUDE. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

OCMC FILE NO: REC 15535
CONTRACT NO: PROJECT:

HWR

LOCATION(S): VARIOUS

PERMISSION IS HEREBY GRANTED TO THE NYCDDC AND IIS DULY AUTHORIZED AGENI, TO ENIER UPON AND RESIRICI THE FLOW OF TRAFFIC AI THE ABOVE LOCATION(S) FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOIED PROJECT, SUBJECT TO THE STPULAIIONS, AS NOTED
BELOW: BELOW:

## 1. SPECIALSTIPULATONS

A. EMBARGOES - A CONSTRUCION EMBARGO WIL APPLY IO THOSE LOCAIIONS EELOW WBICH FALL WIHINTHE HOUDAY EMBARGO OR ANY other special event embargoes pubuished br the bureau of Permit managemeni and Construction Control.
B. GIKE LANES - IF WORK IS IN OR AFFECTING A bIRE LANE, IHE PERMITEE MUST POST ADVANCE WARNING SHGNS 350 feET AND 200 FEET PRIOR TO THE WORK ZONE STATING "CONSTRUCTION IN BIKE LANE AHEAD PROCEED WIIH CAUIION", AND ALSO POST A SIGN AT THE WORK ZONE STATING "CONSTRUCTION IN BIKE LANE PROCEED WITH CAUTION". SUCH SIGNS SHALL BE ORANGE, 3 ' $\times 3^{\circ}$, OIAMOND-SHAPED WITH $4^{\prime \prime}$ black lettering. Signs shalt be posteo maccordance with the federal Manual on Uniform Traffic Control Devices (Mutcol.
C. BIKE SHARE SIATIONS: THE PERMITEE SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT THE OPERAIION OF EXISTING BIKE SHARE STATIONS WITHOUT FIRST CONTACIING NYC BIKE SHARE AT 855-245-331 1 FOR THEIR REQUIREMENTS PRIOR TO COMMENCING WORK.
D. CITYBENCH: THE PERMITEE SHALL NOT REMOVE, RELOCAE, OMMAGE OR DISRUPI AN EXISTING CITYBENCH wITHOUT GRSI CONIACTMGG NYC DOT AI 212-839-6569, OR VIA EMAL AI CITYBENCHODOINYCGQV PRIOR TO COMMENCING WORK
E. PROTECTION OFNYC DEP GREEN INFRASTRUCTURE THE PERMITEE SHALL TAKE PRECAUTION OF NYC DEP GREEN INFRASTRUCTURE IN THE RIGHT-OF-WAY. THE PERMIIEE MLIST PROTECT NYC DEP GREEN INFRASIRUCTURE DOWNISIREAM OF THE WORK OR WITHIN FIVE (5) FEET OF THE WORK AREA. THE PERMITEE MUST EMAIL NYC DEP AT SUSTAINABILITGDEPNYCGGOV FOR PROTECTION REQUREMENIS PRIOR TO COMMENCING WORK. THE PERMITTEE IS RESPONSIBLE FOR RESTORAIION OF DAMAGED NYC DEP INFRASTRUCTURE AS DIRECTED BY NYC DEP.
F. BUS SIOPS - THE PERMITE SHALL PROVIDE WRITEN NOIICE IO NYC DOT OCMC AND NEW YORK CITY TRANSIT (NYCT) A MINIMUM OF FIVE (5) WEEKS IN ADVANCE FOR LANE/STREEI CLOSURES THAT AFFECT BUS ROUTES/BUS STOPS.
G. SIREET UGHIS $\angle$ IRAFEIC SIGNALS: IHE PERMITEE SHALL NOT REMOVE OR RELOCATE EXISTNG STREET LIGHTS OR TRAFFIC SIGNALS WITHOU FIRST OBTANING APPROVAL FROMNYCDOT SIREET LIGHING / TRAFFC SIGNALS UNIT.
H. TRAFFIC CAMERAS, DETECTION/CQMMUNICATION ECUPMENI: IF AI ANY TIME OURING THE APPROVED WORK, THE PERMIITEE ENCOUNTERS TKAFFL SURVEILLANCE CAMERAS, DETECTION EQUIPMENT OR ANY TYPE OF COMMUNICATION EGUAPMENT (WIRELESS OR HARD-WIRED) ON ANY NYC DOT FACIUTY, THAT IS NOI HCLUDED ON THE DESIGN/BULD DRAWINGS, THE PERMITEE SHALL MMEDIATELY NOTIFY NYC DOI TRAFIC MANAGEMENT BY PHONE AI $718-433-3390$ OR $718-433-3340$ AND VIA EMAIL AT IMCODOI, NYC. GOV AND AWAII DIRECHION
PRIOR TO CONTINUNG WORK.

1. MEIERS - THE PERMITIEE SHA MEIER DIVISION AI 718-894-8651.
J. IEST PITS - THE GELOW TRAFFIC STPULATIONS DO NOT APPLY IO TEST PII WORK RELATED TO THLS CONIRACI. WORK HOURS AND OHHER REQUREMENIS FOR TESI PII OPERATIONS MAY DIFFER FROM THE STIPULAHIONS IDENTHIED BELOW. THE PERMIMEE SHALL BE REQUIRED TO OBTAIN SEPARAIE PERNTIS RELATED TO TEST PITS.
K. IEMPORARY PARKING REGULATIONS/PAVEMENT MARXINGS - THE PERMITEE IS REQUIRED TO INSIALL, MAINIAIN AND REMOVE ALL NECESSARY TEMPORARY PARKING AND REGULATORY SIGNS AND PAVEMENT MARKINGS, AND RESTORE THEIR ORIGINAI CONDMON PER NYC DOT STANDARDS, PRIOR TO EXPIRATION OF THEIR PERMITS. THE PERMITEE OR AGENCY PERFORMING PUBLIC OUIREACH SHALI POSI AND MAINIAIN ADVISORY SIGNS A MINIMLM OF 48 HOURS PRIOR TO CHANGING EXISTING PARKING REGLLATION SIGNS TO APPROVED TEMPORARY CONSIRUCIION PARKING REGULAIION SIGNS. THE ADVISORY SIGNS SHOULD BE POSTED ON ALL POLES AND ORIVE RAILS ON THE SEGMENI AFFECTED, INDICATING THE
ACCESSTO ABUTING PROPER IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AI ALU IMMES.
M. AUTHORIZED PARKING - PRIOR TO PERFORMING WORK WHICH IMPACIS AUTHORIZED PARKING, THE PERMITEE SHALL SUBMIT IN WRITING, AND COPY OCMC-STREETS, A REQUEST IO OCCUPY SPACE CURRENILY USEO BY AUTHORIZED VEHCLES. APPROVAL MUST GE RECEIVED FROM Authorize Parking prior Io occupying these areas.

NYC Department of Transportation
Bureau of Permit Wanagement and Construction Control
55. Water Street - $7^{\text {th }}$ Floor, New York, NY 10041

T: 212.839.8621 F: 212.839.8970
www.nyc.gov/dot
N. NOIIEICATON - the Permitee must at least two (2) workng days before the start of construction notify the nyc fire Department ny C Pouce department, NYCEMS, LOcal COMmunify Board, Borough President's Office-Chie engineer, nycdot OCMC OFFICE, AND ALL ABUTIING PROPERTY OWNERS.

- CONSIRUCTION INFORMATIONAL SIGNS-THIS PROJECI REQURES A CONSTRUCIION PROIECT INFORMAIIONAL SIGN (CPIS) IN

CONSTRUCIIONINFORMAIIONAL SIGNS - THIS PROJECI (4) AND (5). CRIERIA AND A PROTOIYPE FOR IHIS SIGN MAY BE FOUND ON THE ACCORDANCE WTIH NY
NYCDOI WEBSTE AI:

## HIE://WWW:NYC.GOV/BIML/DOI/DOWNLOADS/PDF/DOI CPIS_DIRECIKNNS,PDE

P. ENHANCED MITIGATIONS

- ENHANCED MITIGATIONS FOR PEDESIRIAN FIOW, INCLUDING MEIAL FENCING, SHALI BE PROVIDED TO ENSURE PEDESTRIANS STAY within their designated paih/rouie. Pedestrian managers shall be provided to assist with pedestrians at the designated CROSSWALK AREAS.
- "NO STANDING ANYTME-TEMPORARY CONSTRUCIION" SIGNS AND TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED AND MAINTAINED AS WARRANTED BY THE MAINTENANCE AND Protecion of Traffi (MPT) required to faclutate traffic movemenis through the work ione. All temporary signs and pavement markings shall ee removed upon complenon or the project.
- COMMUNITY OUTREACH SHAL BE PROVIDED FOR THE DURATON OF THE PROJECI.


## IHE PERMITTE MUST COORDINATE WITH MTA-NYCT BUS OPERATIONS PRIOR TO MOBILIZING.

## 1. MANTENANCE AND PROTECTION OF TRAFFIC

## A. $4^{H H}$ AVENUE BETWEEN 86TH STREET AND 8YH STREET (BROOKLYN)

Work hours shall be as follows: 9AM-4PM MONDAY-FRIDAY
During working hours, the Permittee shall maintain three 11 ft lanes for traffic.
A. Afler working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, 8 ft adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/fili.
4. One ilt lane may remain closed for concrete curing only for a moximum of 48 hours.
5. The Permiftee shall maintain a minimum of Sft wide sidewak opening for pedesinas from MTA-NYCT.
6. The Permittee cannot block 9 GAT STREET BEE GATING PLACE AND FORT HAMILTON PARKWAY (BROOKLYN)
8. 92nd STREET BETWEEN GAILING PLACE AND FOAT HAMILION PA
2. During the working hours, the Permitte shall maintain three 11 ff lanes for traffic.
3. After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, 8 ft adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/fili.
4. One 11 If lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permittee shall maintain a minimum of sit wide sidew

## C. NARROWS ROAD SOUTH BETWEEN FINGERBOARD ROAD AND 1-278 ENTRANCE

1. Work hours shall be as follows: 9AM-4PM MONDAY-FRIDAY
2. During the working hours, the Permitiee shall maintain one 1 if lane for traffic.
3. After working hours full width of the roadway shall be opened to traffic. The Permittee may contain a

After working of 25 linear feet, 8 ft adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/fill.
4. One 11 ft lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shall maintain a minimum of $5 f t$ wide sidewaik opening for pedestrians at all times.
6. The Permittee must coordinate with the Staten Istand Expressway reconstruction project prior to mobillzing.

## D. HYLAN BOULEVARD, BETWEEN CLOVE ROAD AND MALLORY AVENUE

1. Work hours shall be os follows: 9PM-5AM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain a minimum of one-11t tane for traffic on the eastbound direction of the roadway.
After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, 8 ft adjacent to the curb. Conlainment is only to restrict porking and for storage of excavaled material/fill.
3. One 11 ft lane may remain closed for concrele curing only for a maximum of 48 hours.
4. The Permitfee shall maintain a minimum of 5 ft wide sidewalk opening for pedestrians at all times.

## E. HYLAN BOULEVARD, BETWEEN ALLENDALE ROAD AND MALLORY AVENUE

1. Work hours shall be as follows: 9PM-5AM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain one-11t lane for traffic on the westbound direction of the roadway.
3. After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear teel, 8 ft adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/tili.
4. One 11 t lane may remain closed for concrete curing only for a moximum of 48 hours.
5. The Permitlee shall maintain a minimum of 5 ft wide sidewalk opening for pedestrians at all flmes.

## f. hYLAN BOULEVARD, BETWEEN QUINTARD STREET AND PARKINSON AVENUE

1. Work hours shall be as follows: 9PM-5AM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain one-Ilff lane for traffic on the northbound direction of the roadway. :
3. Affer working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feel. 8 ft adjacent to the curb. Containment is only to restrict porking and for storage of excavated material/fin.
4. One 11 ti lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shall maintain a minimum of 5 ft wide sidewalk opening for pedestrians at all times.

## G. HYLAN BOULEVARD, BETWEEN LIEERTY AVENUE AND SEAVIEW AVENUE

1. Work hours shall be as follows: 9PM-5AM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain fwo-11f lanes for fraffic on the northbound directlon of the roadway. When working on the southbound direction of the roadway, the Permitte shall maintain one-11ft lane for traffic.
3. Simultaneous work on both sides of the street is not permitted.
4. Atter working hours, full width of the roadway shall be opened to tratfic. The Permittee may contain a maximum of 25 linear feet, 8 tt adjacent to the curb. Containment is only to restrict parking and for storage of excovated material/fill.
5. One IIft lane may remain closed for concrete curing only for a maximum of 48 hours.
6. The Permittee shall maintain a minimum of 5 ft wide sidewalk opening for pedestrians al all fimes.

## H. HYLAN BOULEVARD, BETWEEN MIDLAND AVENUE ANO BEDFORD AVENUE

1. Work hours shall be os follows: SPM-5AM MONDAY-FRIDAY
2. During the working hours, the Pemittee shall maintain one-I lit lane for fraffic on the nothbound direction of the roadway.
3. After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 inear feet, Bft adjacent to the curb. Containment is only to restrici parking and for storage of excovated material/itil.
4. One 11ft lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shall maintain a minimum of $5 t \mathrm{t}$ wide sldewalk opening for pedestrians at all times.
6. The Permittee must maintain at least two gas station entrances/exits open.

## I. HYLAN BOULEVARD, BETWEEN EBBITIS STREET AND LINDBERGH AVENUE

1. Work hours shall be as follows: 9PM-5AM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain one-11ft lane for traffic on the nothbound direction of the roadway.
3. After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, 8 ft adjacent to the curb. Containment is only to restrict panking and for storage of excavated material/fill.
4. One 11 if lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permifte shall mainfain o minimum of 5 ft wide sidewalk opening for pedestrians at all times.

## J. HYLAN BOULEVARD, BETWEEN BAY TERRACE AND REDGRAVE AYENUE

1. Work hours shall be os follows: 9AM-4PM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain one-1 1 If lane for traftic on the southbound direction of the roadway.
3. After working hours, full width of the roadway shall be opened to fraffic. The Permittee may contain a maximum of 25 linear feet. 8 fi dajacent to the curb. Containment is only to restrict parking and for storage of excavated material/fill.
4. One liftlane may remain closed for concrefe curing only for a maximum of 48 hours.
5. The Permiffe shall maintain a minimum of $5 f$ wide sidewalk opening for pedestrians al all times.

## K. HYLAN BOULEVARD, BETWEEN NELSON AVENUE AND WIMAN AVENUE

1. Work hours shall be as follows: 9PM-5AM MONDAY-FRIDAY
2. During the working hours, the Permiltee shall maintain one-11t lane for traffic on the southbound direction of the roadway.
3. After working hours, full width of the roadway shall be opened to traffic. The Permitfee may contain o maximum of 25 linear feet, 8 tl adjacent to the curb. Containment is only to restrict parking and for storage of excavaled material/fill.
4. One lift lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shail maintain a minimum of 5 f wide sidewalk opening for pedestrians at all limes.

## L. HYLAN BOULEVARD, BETWEEN WINCHESTER AVENUE AND THORNYCROFT AVENUE

1. Work hours shall be as follows: 9AM-4PM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain one-1 If lane for fraffic on the norihbound direction of the roadway.
3. Afler working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, 8ft adjacent to the curb. Containment is only to restrict parking and tor storage ot excavaled material/fili.
4. One 11 ft lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shall maintain a minimum of $5 f 1$ wide sidewalk opening for pedestrians al all times.

## M. RICHMOND AVENUE, BETWEEN HYLAN BOULEVARD AND KING STREET

1. Work hours shall be as follows: 9AM-4PM MONDAY-FRIDAY
2. During the working hours. The Permittee shall maintain three- 11 ft lanes for traffic.
3. After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, 8 fi adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/fill.
4. One IIf lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shali maintain a minimum of 5 ft wide sidewalk opening for pedestrians at all times.

## N. RICHMOND AVENUE, BETWEEN MOSLEY AVENUE AND ELTINGVILLE BOULEVARD

1. Work hours shall be as follows: 9PM-5PM MONDAY-FRIDAY
2. During the working hours, the Permittee shall maintain three-11fl lanes for fraffic.
3. After working hours, full width of the roadway shall be opened to traffic. The Permittee may contain a maximum of 25 linear feet, $8 f$ adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/fili.
4. One 11 it lane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shall maintain a minimum of 5 ft wide sidewalk opening for pedestrians at all times.
6. The Permititee cannot block the Staten ssiand Railway Station entrance at any time.

## -. MARSH AVENUE, BETWEEN ELMWOOD PARK DRIVE AND RING ROAD

1. Work hours shall be os follows: 9AM-2PM MONDAY-fRIDAY when school is in session and 9AM-4PM MONDAY-FRIDAY when school is in recess.
2. During the working hours, the Permittee shall maintain three-11ft lanes for traffic.
3. After working hours, full width of the roadway shall be opened to trafflc. The Permittee may contain a maximum of 25 linear feet, 8 ft adjacent to the curb. Containment is only to restrict parking and for storage of excavated material/fill.
4. One 11 fl iane may remain closed for concrete curing only for a maximum of 48 hours.
5. The Permitte shall maintain a minimum of 5 ft wide sidewalk opening for pedestrians at all limes.

## Il. GENERALNOTES

A. IHIS IS NOL A PERMII. This STPULATION Sheet must be submited with all requests for permit pertaning to the above CONTRACI AND PRESENT AT THE WORK SITE ALONG WITH ALI ACTIVE CONSIRUCTION PERMIS WHEN THE APPROVED WORK IS BEING PERFORMED.
B. The Perminee must comply with all Construction embargos isued by he nycdot including the holiday embargo.
C. The Permitee shall Comply wit all requiremenis of the nycdot Special evenis unit as idenifed beiow:

## 1. Siren Faibs / Fssivals

- All excavations must be plated with skid reistant plates.
- Plates must be receased and fush whi pavement.
- Al 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 CANNOI MAXE REPARS DUE TO PROHECT INTERFERENCE (AS DEEERMINED BY NYCDOT).
- All equipment, trallers and materia storage must be removeo.

2. Running/Waling / Biking Eyents

- All excavations must be backflled and paved or plates must be recessed and paved over flush with pavement.
- AL PAVEMENT DEfECTS MUST BE CORRECTED WITHIN OR ADJACENT TOTHE WORK ZONE,
- the coniractor is responsible for any defects within the immedite vicinity if nycoof street \& arterial MANTENANCE CANNOI MAKE REPARS DUE TO PROUECI INTERFERENCE (AS DETERMINED BY NYCDOT).
- All equipment, trallers ano material storace must te removed.

3. Parades

- All excavations must be backflled and paved or plates must be receesed and paved over fush with pavement.
- Formation and dispersal area plates must be recessed and fiush with pavement (Plates must be skid resistant).
- All pavement defects must be correcied winhin or adjacent to the work zone.
- the contractor is responsibie for any defects within the mmedate vicinity if nycdot Street \& arterial maintenance cannot make repales due to project interference (as determined by nycdot).
- all equipment, trallers and material storage must be removed.

4. Mayoral Events

- All EXCAVAIIONS MUST BE BACKFLLLED AND PAVED OR PLATES MUSI BE RECESSED AND PAVED OVER FLUSH WIIH PAVEMENT.
- ALl PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- the contractor is responsibie for any defects within the mmedate vicinty if nycdot street \& arterial MAINTENANCE CANNOT MAKE REFARS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- All equipment, trallers and material storage musite removed.
D. All relocation work by the utlities such as; Con edison, telephone, gas and cable companies shall precede the CONTRACTORS' START OF WORK ON ALL AFFECTED ROADWAYS INTHE IMPACIED CONIRACT AREA.
E. The contractor is advised inat other contractors may be working in the general area during the term of this STPULAION. IN WHICH EVENT, THE CONTRACTOR MAY REQUIEE MODFFCAIONS BY THF OCMC STREES.
F. THE PERMITEE IS NOT AUUHORIZED TO ENTER, OCCUPY OR USE ANY PUBLLCLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATON WIHOUT SPECIFIC WRITIEN PERMISSION, WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMIED-ACCESS ARTERIAL HIGHWAY, WRITEN APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQURED. WHEN THELIOCATION IS WITHiN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, WRITEN APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF transportaion or new york City Departmen of Parks and recreation is required. When the location is within the RIGHT-OF-WAY OF ANY OTHER JURISOLCION SUCH AS PRIVAIE PROPERTY, SATE, FEDERAL ETC,, IT IS THE PERMITEE'S RESPONSIBLITY IO Determine the property owner and obtain the writen approvat.
G. The Permitte shall adhere to the nycdot bureal or bridges' Special Provisions for Landscape Protection, MANTENANCE ANO RESTORAION, IIEMS 1.18 .15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITTEE'S ACTVITIES OCCUR WTHIN A LIMITEO ACCESS ARTERIAL HIGHWAY RIGHT - OF - WAY.
H. NO DEVIATION OR OEPARTURE FRDM THESE STPULATIONS WLL BE PERMITIED WIHOUIT THE PRIOR WRITTEN APPROVAL FROM THE OCMCSTREES. REQUEST FOR SUCH MODIFICAIONS SHALI BE SUBMITED TO THE OFFICE OF THE OCMC-STREEIS, NEW YORK CITY DEPARTMENT OF TRANSPORTAION, A MINIMUM OF TWENTY (20) DAYSIN ADVANCE FOR CONSIDERATION.

1. For any Construction activiry resulting in ihe full ciosure of a roadway for more than 180 consecuive calenoar DAYS, THE CONTRACTOR MUST PRODUCE AND SUBMIT A COMMUNITY REASSESSMENT, IMPACT AND AMELIORATION (CRIA) STATEMENT TO NYCDOI PIANNING AND OBTAIN THEIR APPROVAL BEFORE APPLYING FOR PERMITS, IN COMPLIANCE WTH THE PROVISIONS OF local law 24 Staet closure law.
J. FOR IHS PROJECI THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINAIN ALL NECESSARY ADVANCE WARNING AND DETOUR SIGNS, temporary control devices, barkicades, hghts and flashing arrow boards in accordance with the "Manual on

Uniform Traffic Control Devices," the wpical schemes included in this specificailon; ano as ordered by the Engineer-inCHARGE AND THE OCMC-STREETS.
K. The contractor shall be responsible for identifring his construction signage. The idenification shall include the CONTRACTOR'S NAME, SPONSORING agency name and the COntract number. The identification shall ge 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 WTHIN TWO (2) YEARS OF THE SIGNED DATE OF THESE SIPULAIIONS.


## THE CITY OF NEW YORK Department of Sanitation

# Department of Sanitation Rules and Regulations Governing <br> Non-Putrescible Solid Waste Transfer Stations 

S. EUZABETH SEARLE Assistant Commissioner for Legal Affairs
Bureau of Legal Atlairs
44 Beaver Streat
New York, NY 0004
Telephone (212) 2378110
FAX (212) $837-8243$

## INTERPRETIVE MEMORANDUM \# 2 <br> February 14, 1995

## Subject: Temporary Storage and Processing of Construction and Demolition Debris by New York City Agency Contractors

Contractors performing construction work for New York City agencies may be required to excavate dirt, concrete, rock, gravel and similar materials ("construction matcrials") from a contract site or to remove from a contract site construction materials
 streets or buildings. On street construction projects. construction materials required to be excavated or removed may also include asphalt. The purpose of this Interpretive Memorandum is to (a) define the circumstances under which the Department of Sanitation (the "Deparment") will not deem its Rules and Regulations Governing NonPutrescible Solid Waste Transfer Stacions (Lhe "Rules") to apply to the temporary storage, processing and/or stockpiling (collectively, "stockpiling") of such construction materials and (b) the procedure for ensuring such exemption. It is the responsibility of the contracting agency to oversee its contractors' compliance with the Rules and with this
Interpretive Memorandum. Interpretive Memorandum.

## 1. When No Transfer Station Permit is Required <br> Where a City contractor has:

(a) set aside an area of a contract site for stockpiling construction materials excavated from and/or intended for that site; of
(b) received written approval from the contracting agency for an off-site stockpiling location,
the Department will not deem such stockpiling location a transfer station and will not require the contractor to obtain a transier station permit so long as:-
(c) no construction matcrials or dcbris from oft the contract site are received at the designated location for subscquant transfer to another location (other than the contract site); and
(d) the temporary stockpiling location is clearly described as such in the contract or clearly approved by the construction agency and designated as such in writing to the Department by the agency; and
(e) the construction agency represents in writing to the Deparment that such agency will monitor the temporary stockpiling location and ensure its clean-up and restoration pursuant to the procedures set out in this
memorandum.


## Example: Strect Construction Projects

As part of a contract for strect construction, the contractor may be working at one end of a street and using an area at the other end of the street for the temporary stockpiling of construction matcrials. Boun end's of the street are part of the construction contract site. In addition, the contractor may have leased an off-site location for temporary stockpiling of materials. which, following processing, will be reincorporated into the contract site, with some portion of the remainder designated for delivery to a Department disposal facility. Neither location will be regulated by the Department as a transfer station so long as the procedurcs set out in this memorandum are followed.

## 2. Procedure for Excention.

Upon a City construction agency's approval of any location to be designated as a temporary processing, storage or stockpiling area, that agency must determine that (a) its contract with the contractor provides for clean-up and nestoration of such area by, for example. the contractor's posting of a restoration bond and/or by contractual set-off and (b) the agency has adequate procedures for monitoring the designated area to ensure that it does not violate the provisions set forth in this memorandum and that such location is cleaned up and restored at the completion of the contract work.

The City construction agency must submit an official letter to the Department acknowledging compliance with both (a) and (b) immediately above and representing that the agency till cnsure the contractor's compliance. The letter to be submined mist be in substantially the following form, addressed to the Director, Bureau of Waste Disposal. Department of Sanitation, 125 Worth Street, Room 726. New York, NY 10013:

| "The New York City Department of__ (Coniractor) (the "Agency") |
| :--- |
| has awarded a construction contract to_ (Contract |
| Site)_ (the "Contractor") for work to be performed at |

Site)
a. This Agency has approved the following locations to be used by the Contactor for the temporary storage, processing andfor stockpiling of construction materials (the "Stockpiling Locations") excavated from the construction site or intended for the construction site:
b. The terms of the contract require the Contractor to clcan up and restore the Stockpiling Locations, whether on or off the contract site, at or before the completien of the contract work.
c. This Agency assumes responsibility for the monitoring of Stockpiling Locations to ensure that only materials received from and/or intended for the construction site are stockpiled at such locations and we will enforce clean-up and restoration of such Locations at the end of their use for temporary stockpiling or at the termination of the contract, whichever occurs carlicr. through restoration
bonding requirements and/or contractual set-off provisions such that the costs of clean-up and restoration will not become a charge to the Department or the City."

## 3. When a Transfer Station Permit is Required

A transfer station permit will be required under any circurnstances other than those outlined above. Except in the specifically defined circumstances set forth in this memorandum, any operator of a location or facility which receives, processes, stores or stockpiles construction and demolition debris or fill material for purposes of transfer to another location, including to a New York City Department of Sanitation facility, and whetber or not under contract to the Department for the delivery of such materials, will be fully subject to the Department's transfer station rules and liable for enforcement for violations.

FEDERAL TRANSIT ADMINISTRATION PROJECTS
FEDERAL TRANSIT ADMINISTRATION ATTACHMENTS

# FEDERAL TRANSIT ADMINISTRATION FUNDING ATTACHMENT 

## THIS ATTACHMENT IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Any substantial modification of the Contract shall be subject to approval by the State Commissioner of Transportation and the Federal Transit Administration, in addition to the City
2. The Contractor shall be responsible for compliance with all the provisions of the following Federal Transit Administration (FTA) Third Party Requirements, Standard Clauses for all New York State Contracts, and Exhibits which are hereby made a part of the original contract documents and are annexed hereto:

FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS
Appendix A - BUY AMERICA CERTIFICATION
Appendix AI - DISCLOSURE OF LOBBYING ACTIVITIES
Appendix A2 - CERTIFICATION OF A CONTRACTOR REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

Appendix A3 - CERTIFICATION OF A SUBCONTRACTOR/SUPPLIER REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY

Appendix B - REQUIRED CONTRACT PROVISIONS DBE Program
Appendix C - DETERMINING GOOD FAITH EFFORTS
Appendix D - PROMPT PAYMENT AFFIDAVIT
Appendix E - SAMPLE PRIME CONTRACTOR AWARD LETTER
Appendix F - MINORITY OWNED FINANCIAL INSTITUTIONS
Appendix G - PREVAILING WAGE RATES, CURRENT DAVIS-BACON
PREVAILING WAGE RATES

STANDARD CLAUSES FOR ALL NEW YORK STATE CONTRACTS DBE FORMS:

AAP 15 FTA Rev. (1/14)

AAP10
(01/14)
AAP 19 FTA (1/14)

DESIGNATION OF AFFIRMATIVE ACTION (REPRESENTATIVES BY CONTRACTORS/SUBCONTRACTORS

NYC Department of Transportation DBE SOLICITATIONS LOG

NEW YORK CITY DEPARTMENT OF TRANSPORTATION DISADVANTAGED BUSINESS ENTERPRISE SCHEDULE OF UTILIZATION
AAPHC 89 FTA
(1/14)
AAPHC 89-1 FTA (1/14)

AAP 21LL (FTA) (rev. 1/14)

AAP 22
(12/08)
AAP 23LL (2/11)
PRE-AWARD DBE TRUCKING COMMITMENT INFORMATION SUBCONTRACTOR/CONSULTANT PROFILE FORM INITIAL LIST OF SUBCONTRACTORS

SUBCONTRACTOR/SUBCONSULTANT MONTHLY PAYMENT REPORT

AGENCY CHIEF CONTRACTING OFFICE, CIVIL RIGHTS COMPLAINT FORM

ANNUAL LIST OF SUBCONTRACTORS

## FEDERAI TRANSIT ADMINISTRATION (FTA) FUNDING ATTACHMENT

THE CITY OF NEW YORK<br>DEPARTMENT OF DESIGN AND CONSTRUCTION<br>INFRASTRUCTURE DIVISION<br>BUREAU OF DESIGN

THIS ATTACEMENT IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Any substantial modification of the Contract shall be subject to approval by the State Commissioner of Transportation and the Federal Transit Administration, in addition to the City agencies involved.
2. The Contractor shall be responsible for compliance with all the provisions of the following Federal Transit Administration (FTA) Third Party Requirements, standard Clauses for all New York state Contracts, and Exhibits which are hereby made a part of the original contract documents and are annexed hereto:

FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS
Appendix A - BUY AMERICA CERTIFICATION
Appendix A1 - DISCLOSURE OF LOBBYING ACTIVITIES
Appendix A2 - CERTIFICATION OF A CONTRACTOR REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

Appendix A3 - CERTIFICATION OF A SUBCONTRACTOR/SUPPLIER REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS
Appendix B - REQUIRED CONTRACT PROVISIONS DBE Program
Appendix $C$ - DETERMINING GOOD FAITH EFFORTS
Appendix D - PROMPT PAYMENT AFFIDAVIT
Appendix E - SAMPLE PRIME CONTRACTOR AWARD LETTER
Appendix F - MINORITY OWNED FINANCIAL INSTITUTIONS
Appendix $G$ - PREVAILING WAGE RATES, CURRENT DAVIS-BACON PREVAILING WAGE RATES

In addition to compliance with the above FTA requirements, the Contractor shall also be required to comply with all City requirements as depicted in the Information for Bidders and Standard Construction Contract herein. Wherever a conflict may exist, the FTA Regulations shall take precedence.
3. All references to $M / W B E$ within the Bid Documents shall be deleted and the Disadvantaged Business Enterprise (DBE) requirements with a goal of $11 \%$ shall be substituted.
4. Amendments to Information for Bidders:
a) Refer to Page 6, SECTION 20. Low Tie Bids; Delete Article 20, in its entirety, and substitute the words "ARTICLE 20. (NO TEXT)".
b) Refer to Pages 12 and 13, SECTION 37. Locally Based Enterprise Requirements (LBE); Delete the SECTION 37, in its entirety, and substitute the words "ARTICLE 37. (NO TEXT)". See FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS attachment, Article 28. Disadvantaged Business Enterprise (DBE) (49 CFR Part 26) and Appendices B, C, D, and E.
5. Amendments to Standard Construction Contract:
a) Refer to Page 29, ARTICLE 21. RETAINED PERCENTAGE; Delete Article 29, in its entirety; Substitute the following:
"ARTICLE 21. (NO TEXT)"
b) Refer to Page 74 and 75, ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM; Delete Article 67, in its entirety, and substitute the words "ARTICLE 67. (NO TEXT)". See FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS attachment, Article 29. Disadvantaged Business Enterprise (DBE) (49 CFR Part 26) and Appendices B, C, D, and E.
6. Amendments to the NYC Department of Transportation Standard Highway Specifications, Volume I, General Conditions:
a) Refer to Pages 36 through 38, Article 1.06.46. Project
Sign;

Add the following text to the end of Article 1.06.46:
"(B) ADDITIONAL FTA PROJECT SIGN

In addition to the Project Sign specified in Subsection 1.06.46.(A), above, the Contractor shall also be required to furnish and install an FTA Project Sign as shown on the attached drawing. The FTA Project Sign shall be posted and maintained upon the site at a point and in a prominent position where directed by the Commissioner. The Contractor shall protect and repair the sign from damage during the continuance of work under the Contract. In addition, the requirements for Sign Quality, Schedule, and Removal as specified under Subsection 1.06.46.(A)2, 3, and 4 shall also apply to the FTA Project Sign and the sign panel material shall be the same as that used for the Project Sign required under Subsection 1.06.46.(A), but with the dimensions of the sign as shown on the attached drawing."

## FTA PROJECT SIGN



## FEDERAL TRANSIT ADMINISTRATION (FTA) THIRD PARTY REQUIREMENTS

For purposes of the FTA Third Party Requirements, "the City" shall mean the New York City agency that procured the contract in which this document is incorporated.

This contract is subject to the Federal Transit Administration (FTA) requirements for implementing the U.S. Department of Transportation (USDOT) regulations for the following areas:

## 1. FLY AMERICA (49 U.S.C. $\S 40118,41$ CFR Part 301-10)

Fly America Requirements - The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

## 2. BUY AMERICA (49 U.S.C. 5323 (i), 49 CFR Part 661 )

Buy America - The contractor agrees to comply with 49 U.S.C. 5323 (j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTAfunded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7 , and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

## 3. CHARTER BUS REOUIREMENTS (49 U.S.C. 5323(d), 49 CFR Part 604)

Charter Service Operations - The contractor agrees to comply with 49 U.S.C. 5323(d) and 49 CFR Part 604, which provides that recipients and subrecipients of FTA assistance are prohibited from providing charter service using federally funded equipment or facilities if there is at least one private charter operator willing and able to provide the service, except under one of the exceptions at 49 CFR 604.9. Any charter service provided under one of the exceptions must be "incidental," i.e., it must not interfere with or detract from the provision of mass transportation.

## 4. SCHOOL BUS REOUIREMENTS (49 U.S.C. 5323(F), 49 CFR Part 605)

School Bus Operations - Pursuant to 69 U.S.C. 5323(f) and 49 CFR Part 605, recipients and subrecipients of FTA assistance may not engage in school bus operations exclusively for the transportation of students and school personnel in competition with private school bus operators unless
qualified under specified exemptions. When operating exclusive school bus service under an allowable exemption, recipients and subrecipients may not use federally funded equipment, vehicles, or facilities.

## 5. CARGO PREFERENCE (46 U.S.C. 1241, 46 CFR Part 381)

Cargo Preference - Use of United States-Flag Vessels - The contractor agrees: a. privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b . to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of -lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill of lading.) c. to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

## 6. SEISMIC SAFETY REOUIREMENTS (42 U.S.C. 7701 et seq., 49 CFR Part 41)

Seismic Safety - The contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. The contractor also agrees to ensure that all work performed under this contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

## 7. ENERGY CONSERVATION (42 U.S.C. 6321 et seq.. 49 CFR Part 18)

Energy Conservation - The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

## 8. CLEAN WATER (33 U.S.C. 1251)

Clean Water - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The Contractor agrees to report each violation to recipient and understands and agrees that recipient will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.
(2) The Contractor also agrees to include these requirements in each subcontract exceeding $\$ 100,000$ financed in whole or in part with Federal assistance provided by FTA.

## 9. BUS TESTING (49 U.S.C. 5318(e), 49 CFR Part 665)

Bus Testing - The Contractor agrees to comply with 49 USC 5318 (e) and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following:

1) A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient which will be prior to the recipient's final acceptance of the first vehicle.
2) A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.
3) If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.
4) If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

## 10. PRE-AWARD AND POST DELIVERY AUDITS REOUIREMENTS (49 U.S.C. 5323, 49 CFR Part 663)

The Contractor agrees to comply with 49 U.S.C. §5323(1) and FTA's implementing regulation 49 CFR Part 663 and to submit the following certifications:
(1) Buy America Requirements: The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Bidder/Offeror certifies compliance with Buy America, it shall submit documentation which lists 1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and 2) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.
(2) Solicitation Specification Requirements: The Contractor shall submit evidence that it will be capable of meeting the bid specifications.
(3) Federal Motor Vehicle Safety Standards (FMVSS): The Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations.

## 11. LOBBYING (31 U.S.C. 1352, 49 CFR Parts 19 and 20)

Contractors who apply or bid for an award of $\$ 100,000$ or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

## 12. ACCESS TO RECORDS AND REPORTS (49 U.S.C. 5325, 49 CFR 18.36(i), 49 CFR 633.17)

The Contractor shall comply with the following access to records requirements:

1. In accordance with 49 CFR 18.36(i), the Contractor agrees to provide the City, the FTA 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. Contractor also agrees, pursuant to 49 C. F. R. 633.17 to provide the FTA Administrator or his/her authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a) 1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.
2. Where the City, in accordance with 49 U.S.C. 5325 (a) enters into a contract for a capital project or improvement (defined in 49 U.S.C. 5302(a) (1) through other than competitive bidding, the Contractor shall make available records related to the contract to the City, the Secretary of Transportation and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.
3. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
4. The Contractor agrees to maintain all books, records, accounts, reports and other related documents required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the City, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. (Reference 49 CFR 18.39 (i)(11).
5. FTA does not require the inclusion of these requirements in subcontracts.

## Requirements for Access to Records and Reports by Types of Contract

| Contract Characteristics |  | Operational Service: Contract | $\qquad$ | Construction *) | Architectaral Engineering | Acquisition of Rolling Stock | Professional Services |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. State Grantees <br> a. Contracts below <br> SAT ( $\$ 100,000$ ) |  | None | Those imposed on state pass thru to Contractor | None |  | None | None |
| b. Contracts above \$100,000/ Capital Projects |  | None unless ${ }^{1}$ <br> non- <br> competitive <br> award |  | Yes, if noncompetitive award or if funded thru ${ }^{2}$ 5307/5309/ 5311 | None unless noncompetitive award | None unless noncompetitive award | None unless noncompetitive award |
| II . Non State Granter <br> a. Contracts below <br> SAT ( $\$ 100,000$ ) |  | $Y^{3}{ }^{3}$ | Those imposed on non-state Grantee pass thru to Contractor | Yes | Yes | Yes | Yes |
| b. Contracts above \$100,000/Capital Projects |  | Yes ${ }^{3}$ |  | Yes | Yes | Yes | Yes |

Sources of Authority:
${ }^{1} 49$ USC 5325 (a)
${ }^{2} 49$ CFR 633.17
${ }^{3} 18$ CFR 18.36 (i)
SAT: Source Acquisition Threshold

## 13. FEDERAL CHANGES (49 CFR Part 18)

Federal Changes - The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between the City and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

## 14. BONDING REOUIREMENTS

(a) Bid Security

A Bid Bond must be issued by a fully qualified surety company acceptable to the City and listed as a company currently authorized under 31 CFR, Part 223 as possessing a Certificate of Authority as described thereunder.
(b) Rights Reserved

In submitting this Bid, it is understood and agreed by bidder that the right is reserved by the City to reject any and all bids, or part of any bid, and it is agreed that the Bid may not be withdrawn for a period of [ninety (90)] days subsequent to the opening of bids, without the written consent of the City.

It is also understood and agreed that if the undersigned bidder should withdraw any part or all of his bid within [ninety (90)] days after the bid opening without the written consent of the City, shall refuse or be unable to enter into this Contract, as provided above, or refuse or be unable to furnish adequate and acceptable Performance Bonds and Labor and Material Payments Bonds, as provided above, or refuse or be unable to furnish adequate and acceptable insurance, as provided above, he shall forfeit his bid security to the extent of the City's damages occasioned by such withdrawal, or refusal, or inability to enter into an agreement, or provide adequate security therefor.

It is further understood and agreed that to the extent the defaulting bidder's Bid Bond, Certified Check, Cashier's Check, Treasurer's Check, and/or Official Bank Check (excluding any income generated thereby which has been retained by the City as provided in [Item x "Bid Security" of the Instructions to Bidders]) shall prove inadequate to fully recompense the City for the damages occasioned by default, then the undersigned bidder agrees to indemnify the City and pay over to the City the difference between the bid security and the City's total damages, so as to make the City whole.

The undersigned understands that any material alteration of any of the above or any of the material contained on this form, other than that requested, will render the bid unresponsive.

## Performance and Payment Bonding Requirements (Construction)

The Contractor shall be required to obtain performance and payment bonds as follows:
(a) Performance bonds

1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the City determines that a lesser amount would be adequate for the protection of the City.
2. The City may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The City may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.
(b) Payment bonds
3. The penal amount of the payment bonds shall equal:
(i) Fifty percent of the contract price if the contract price is not more than $\$ 1$ million.
(ii) Forty percent of the contract price if the contract price is more than $\$ 1$ million but not more than $\$ 5$ million; or
(iii) Two and one half million if the contract price is more than $\$ 5$ million.
4. If the original contract price is $\$ 5$ million or less, the City may require additional protection as required by subparagraph 1 if the contract price is increased.

## Performance and Payment Bonding Requirements (Non-Construction)

The Contractor may be required to obtain performance and payment bonds when necessary to protect the City's interest.
(a) The following situations may warrant a performance bond:

1. The City property or funds are to be provided to the Contractor for use in performing the contract or as partial compensation (as in retention of salvaged material).
2. A Contractor sells assets to or merges with another concern, and the City, after recognizing the latter concern as the successor in interest, desires assurance that it is financially capable.
3. Substantial progress payments are made before delivery of end items starts.
4. Contracts are for dismantling, demolition, or removal of improvements.
(b) When it is determined that a performance bond is required, the Contractor shall be required to obtain performance bonds as follows:
5. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the City determines that a lesser amount would be adequate for the protection of the City.
6. The City may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The City may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.
(c) A payment bond is required only when a performance bond is required, and if the use of payment bond is in the City's interest.
(d) When it is determined that a payment bond is required, the Contractor shall be required to obtain payment bonds as follows:
7. The penal amount of payment bonds shall equal:
(i) Fifty percent of the contract price if the contract price is not more than $\$ 1$ million;
(ii) Forty percent of the contract price if the contract price is more than $\$ 1$ million
but not more than $\$ 5$ million; or
(iii) Two and one half million if the contract price is increased.

## Advance Payment Bonding Requirements

The Contractor may be required to obtain an advance payment bond if the contract contains an advance payment provision and a performance bond is not furnished. The City shall determine the amount of the advance payment bond necessary to protect the City.

## Patent Infringement Bonding Requirements (Patent Indemnity)

The Contractor may be required to obtain a patent indemnity bond if a performance bond is not furnished and the financial responsibility of the Contractor is unknown or doubtful. The City shall determine the amount of the patent indemnity to protect the City.

## Warranty of the Work and Maintenance Bonds

1. The Contractor warrants to the City, the Architect and/or Engineer that all materials and equipment furnished under this Contract will be of highest quality and new unless otherwise specified by the City, free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards shall be considered defective. If required by the City, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
2. The Work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Work must be of safe, substantial and durable construction in all respects. The Contractor hereby guarantees the Work against defective materials or faulty workmanship for a minimum period of one (1) year after Final Payment by the City and shall replace or repair any defective materials or equipment or faulty workmanship during the period of the guarantee at no cost to the City. As additional security for these guarantees, the Contractor shall, prior to the release of Final Payment [as provided in Item X below], furnish separate Maintenance (or Guarantee) Bonds in form acceptable to the City written by the same corporate surety that provides the Performance Bond and Labor and Material Payment Bond for this Contract. These bonds shall secure the Contractor's obligation to replace or repair defective materials and faulty workmanship for a minimum period of one (1) year after Final Payment and shall be written in an amount equal to ONE HUNDRED PERCENT ( $100 \%$ ) of the CONTRACT SUM, as adjusted (if at all).

## 15. CLEAN AIR( 42 U.S.C. 7401 et seq, 40 CFR 15.61, 49 CFR Part 18)

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. $\S \S 7401$ et seq. The Contractor agrees to report each violation to NYCDOT and understands and agrees that NYCDOT will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.
(2) The Contractor also agrees to include these requirements in each subcontract exceeding $\$ 100,000$ financed in whole or in part with Federal assistance provided by FTA.

## 16. RECYCLED PRODUCTS (42 U.S.C. 6962, 40 CFR Part 247, Executive Order 12873)

The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

## 17. DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS

1) Minimum wages - (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
(ii)(A) The Contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
(1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and
(2) The classification is utilized in the area by the construction industry; and
(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
(4) With respect to helpers as defined in 29 CFR $5.2(\mathrm{n})(4)$, such a classification prevails in the area in which the work is performed.
(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S.

Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30 -day period that additional time is necessary.
(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
(iv) If the Contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
(v)(A) The Contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:
(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
(2) The classification is utilized in the area by the construction industry; and
(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30 -day period that additional time is necessary.
(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to
the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the Contracting officer or will notify the Contracting officer within the 30 -day period that additional time is necessary.
(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v)
(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
2) Withholding - The City 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 the Contractor under this contract or any other Federal contract with the same Contractor, or any other federally-assisted contract subject to DavisBacon prevailing wage requirements, which is held by the same Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the City may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
3) Payrolls and basic records - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR $5.5(\mathrm{a})(1)(\mathrm{iv})$ that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section $1(\mathrm{~b})(2)(B)$ of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the City for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 . This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The Contractor is responsible for the submission of copies of payrolls by all subcontractors.
(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
(1) That the payroll for the payroll period contains the information required to be maintained under section $5.5(\mathrm{a})(3)(\mathrm{i})$ of Regulations, 29 CFR part 5 and that such information is correct and complete;
(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
(iii) The Contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
4) Apprentices and trainees - (i) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
(ii) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
(iii) Equal employment opportunity - The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
5) Compliance with Copeland Act requirements - The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
6) Subcontracts - The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
7) Contract termination: debarment - A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8) Compliance with Davis-Bacon and Related Act requirements - All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
9) Disputes concerning labor standards - Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5 , 6 , and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
10) Certification of eligibility - (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## 18. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

(1) Overtime requirements - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
(2) Violation; liability for unpaid wages; liquidated damages - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States 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 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 Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same 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 and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The 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.

## 19. NO GOVERNMENT OBLIGATION TO THIRD PARTIES

## No Obligation by the Federal Government

(1) The City and the Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the City, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.
(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the Subcontractor who will be subject to its provisions.

## 20. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS (31 U.S.C 3801 et seq.. 49 CFR Part 31, 18 U.S.C. 1001,49 U.S.C. 5307)

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R.

Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.
(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307 , the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § $5307(\mathrm{n})(1)$ on the Contractor, to the extent the Federal Government deems appropriate.
(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

## 21. TERMINATION (49 U.S.C. Part 18, FTA Circular 4220.1F)

The Contractor agrees to include these provisions in all subcontracts in excess of $\$ 10,000$.
a. Termination for Convenience (General Provision) - The City may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the City's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the City to be paid to the Contractor. If the Contractor has any property in its possession belonging to the City, the Contractor will account for the same, and dispose of it in the manner the City directs.
b. Termination for Default [Breach or Cause] (General Provision) - If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services and the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the City may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

If it is later determined by the City that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the City, after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.
c. Opportunity to Cure (General Provision) - The City, in its sole discretion may, in the case of a termination for breach or default, allow the Contractor [an appropriately short period of time] in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

If Contractor fails to remedy to the City's satisfaction the breach or default or any of the terms, covenants, or conditions of this Contract within the period of time specified by the City after receipt by Contractor or written notice from the City setting forth the nature of said breach or default, the City shall have the right to terminate the

Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude the City from also pursuing all available remedies against Contractor and its sureties for said breach or default.
d. Waiver of Remedies for any Breach - In the event that the City elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by the City shall not limit the City's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.
e. Termination for Convenience (Professional or Transit Service Contracts) - The City, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the City shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.
f. Termination for Default (Supplies and Service) - If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the City may terminate this contract for default. The City shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the City.
g. Termination for Default (Transportation Services) - If the Contractor fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract, or any extension thereto, or if the Contractor fails to comply with any other provisions of this contract, the City may terminate this contract for default. The City shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of default. The Contractor will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.
h. Termination for Default (Construction) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, the City may terminate this contract for default. the City shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the City may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the City resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the City in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if:

1. the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of the City, acts of another Contractor in the performance of a contract with the City, epidemics, quarantine restrictions, strikes, freight embargoes; and
2. the Contractor, within [10] days from the beginning of any delay, notifies the City in writing of the causes of delay. If in the judgment of the City, the delay is excusable, the time for completing the work shall be extended.

The judgment of the City shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the City.
i. Termination for Convenience of Default (Cost-Type Contracts) -The City may terminate this contract, or any portion of it, by serving a notice or termination to the Contractor. The notice shall state whether the termination is for convenience of the City or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the contractor has failed to perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from the City, or property supplied to the Contractor by the City. If the termination is for default, the City may fix the fee, if the contract provides for a fee, to be paid the contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the City and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of the City, the Contractor shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, the City determines that the Contractor has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the contractor, the City, after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

## 22. GOVERNMENT-WIDE DEBARMENT AND SUSPENSION (NON-PROCUREMENT) (49 CFR Part 29, Executive Orders 12549/12689)

Suspension and Debarment - This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29 , Subpart C and must include the requirement to comply with 49 CFR 29, Subpart $C$ in any lower tier covered transaction it enters into.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:
The certification in this clause is a material representation of fact relied upon by the City. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

## 23. PRIVACY ACT (5 U.S.C. 552)

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:
(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its
employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.
(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

## 24. CIVIL RIGHTS REOUIREMENTS (29 U.S.C. 623, 42 U.S.C. 2000, 42 U.S.C. 6102,42 U.S.C. 12112, 42 U.S.C. 12132, 49 U.S.C. \& 5332, 29 CFR Part 1630, 41 CFR Part 60 et seq.)

(1) Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
(2) Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:
(a) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. 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. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
(b) Age - In accordance with Section 4 of the Age Discrimination in Employment Act, as amended, 29 U.S.C. § §621 through 634 and 29 CFR Part 1625, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
(c) Disabilities - In accordance with 49 U.S.C. § 5301(d), which states the Federal policy that elderly individuals and individuals with disabilities have the same right as other individuals to use public transportation services and facilities, and that special efforts shall be made in planning and designing those services and facilities to implement transportation accessibility rights for elderly individuals and individuals with disabilities. The Contractor shall also agree to comply with all applicable provisions of Section 504 of the Rehabilitation Act of 1973, as amended, with 29 U.S.C. § 794, which prohibits discrimination on the basis of disability; with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 et seq., which requires that accessible facilities and services be made available to individuals with disabilities; and with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 et seq., which requires that buildings and public accommodations be accessible to individuals with disabilities, and any subsequent amendments to these laws or other laws pertaining to access for individuals with disabilities to
the extent applicable. In addition, the Contractor agrees to comply with applicable implementing Federal regulations and directives and any subsequent amendments that the FTA may issue.
(d) Limited English Proficiency (LEP) - Executive Order No. 13166, "Improving Access to Services for Persons with Limited English Proficiency," August 11, 2000, 42 U.S.C. Section 2000d-1 note, and USDOT/FTA , "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons," December 14, 2005. Contractors will comply, based on in receipt of Federal funding through the City and assisting the City in fulfilling its responsibilities to LEP persons, pursuant to Title VI of the Civil Rights Act of 1964 and implementing regulations in accordance to FTA Circular 4702.1.
(3) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

## 25. BREACHES AND DISPUTE RESOLUTION (49 CFR Part 18, FTA Circular 4220.1F)

Disputes - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of the City. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the [title of employee]. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the [title of employee] shall be binding upon the Contractor and the Contractor shall abide by the decision.

Performance During Dispute - Unless otherwise directed by the City, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the City and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the City is located.

Rights and Remedies - The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the City or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.

## 26. PATENT AND RIGHTS IN DATA (37 CFR Part 401, 49 CFR Parts 18 and 19)

A. Rights in Data - The following requirements apply to each contract involving experimental, developmental or research work:
(1) The term "subject data" used in this clause means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the contract. The term includes graphic or pictorial delineation in media such as drawings or photographs; text in specifications or related performance or design-type documents; machine forms such as punched cards, magnetic tape, or computer memory printouts; and information retained in computer memory. Examples include, but are not limited to: computer software, engineering drawings and
associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term "subject data" does not include financial reports, cost analyses, and similar information incidental to contract administration.
(2) The following restrictions apply to all subject data first produced in the performance of the contract to which this Attachment has been added:
(a) Except for its own internal use, the Purchaser or Contractor may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may the Purchaser or Contractor authorize others to do so, without the written consent of the Federal Government, until such time as the Federal Government may have either released or approved the release of such data to the public; this restriction on publication, however, does not apply to any contract with an academic institution.
(b) In accordance with 49 C.F.R. § 18.34 and 49 C.F.R. § 19.36, the Federal Government reserves a royaltyfree, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for "Federal Government purposes," any subject data or copyright described in subsections (2)(b) 1 and (2)(b) $\underline{2}$ of this clause below. As used in the previous sentence, "for Federal Government purposes," means use only for the direct purposes of the Federal Government. Without the copyright owner's consent, the Federal Government may not extend its Federal license to any other party.

1. Any subject data developed under that contract, whether or not a copyright has been obtained; and
2. Any rights of copyright purchased by the Purchaser or Contractor using Federal assistance in whole or in part provided by FTA.
(c) When FTA awards Federal assistance for experimental, developmental, or research work, it is FTA's general intention to increase transportation knowledge available to the public, rather than to restrict the benefits resulting from the work to participants in that work. Therefore, unless FTA determines otherwise, the Purchaser and the Contractor performing experimental, developmental, or research work required by the underlying contract to which this Attachment is added agrees to permit FTA to make available to the public, either FTA's license in the copyright to any subject data developed in the course of that contract, or a copy of the subject data first produced under the contract for which a copyright has not been obtained. If the experimental, developmental, or research work, which is the subject of the underlying contract, is not completed for any reason whatsoever, all data developed under that contract shall become subject data as defined in subsection (a) of this clause and shall be delivered as the Federal Government may direct. This subsection (c), however, does not apply to adaptations of automatic data processing equipment or programs for the Purchaser or Contractor's use whose costs are financed in whole or in part with Federal assistance provided by FTA for transportation capital projects.
(d) Unless prohibited by state law, upon request by the Federal Government, the Purchaser and the Contractor agree to indemnify, save, and hold harmless the Federal Government, its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the Purchaser or Contractor of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under that contract. Neither the Purchaser nor the Contractor shall be required to indemnify the Federal Government for any such liability arising out of the wrongful act of any employee, official, or agents of the Federal Government.
(e) Nothing contained in this clause on rights in data shall imply a license to the Federal Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Federal Government under any patent.
(f) Data developed by the Purchaser or Contractor and financed entirely without using Federal assistance provided by the Federal Government that has been incorporated into work required by the underlying contract to which this Attachment has been added is exempt from the requirements of subsections (b), (c), and (d) of this clause, provided that the Purchaser or Contractor identifies that data in writing at the time of delivery of the contract work.
(g) Unless FTA determines otherwise, the Contractor agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.
(3) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (i.e., a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual, etc.), the Purchaser and the Contractor agree to take the necessary actions to provide, through FTA, those rights in that invention due the Federal Government as described in
U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.
(4) The Contractor also agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.
B. Patent Rights - The following requirements apply to each contract involving experimental, developmental, or research work:
(1) General - If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under the contract to which this Attachment has been added, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, the Purchaser and Contractor agree to take actions necessary to provide immediate notice and a detailed report to the party at a higher tier until FTA is ultimately notified.
(2) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual), the Purchaser and the Contractor agree to take the necessary actions to provide, through FTA, those rights in that invention due the Federal Government as described in U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.
(3) The Contractor also agrees to include the requirements of this clause in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

## 27. TRANSIT EMPLOYEE PROTECTIVE AGREEMENTS 49 U.S.C. $\& 5310, \& 5311$, and \& 5333; 29 CFR Part 215

(a) General Transit Employee Protective Requirements - To the extent that FTA determines that transit operations are involved, the Contractor agrees to carry out the transit operations work on the underlying contract in compliance with terms and conditions determined by the U.S. Secretary of Labor to be fair and equitable to protect the interests of employees employed under this contract and to meet the employee protective requirements of 49 U.S.C. A $5333(\mathrm{~b})$, and U.S. DOL guidelines at 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions are identified in the letter of certification from the U.S. DOL to FTA applicable to the FTA Recipient's project from which Federal assistance is provided to support work
on the underlying contract. The Contractor agrees to carry out that work in compliance with the conditions stated in that U.S. DOL letter. The requirements of this subsection (1), however, do not apply to any contract financed with Federal assistance provided by FTA either for projects for elderly individuals and individuals with disabilities authorized by 49 U.S.C. § 5310(a)(2), or for projects for nonurbanized areas authorized by 49 U.S.C. § 5311. Alternate provisions for those projects are set forth in subsections (b) and (c) of this clause.
(b) Transit Employee Protective Requirements for Projects Authorized by 49 U.S.C. \& 5310(a)(2) for Elderly Individuals and Individuals with Disabilities

- If the contract involves transit operations financed in whole or in part with Federal assistance authorized by 49 U.S.C. § 5310 (a)(2), and if the U.S. Secretary of Transportation has determined or determines in the future that the employee protective requirements of 49 U.S.C. § 5333(b) are necessary or appropriate for the state and the public body subrecipient for which work is performed on the underlying contract, the Contractor agrees to carry out the Project in compliance with the terms and conditions determined by the U.S. Secretary of Labor to meet the requirements of 49 U.S.C. § 5333(b), U.S. DOL guidelines at 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions are identified in the U.S. DOL's letter of certification to FTA, the date of which is set forth Grant Agreement or Cooperative Agreement with the state. The Contractor agrees to perform transit operations in connection with the underlying contract in compliance with the conditions stated in that U.S. DOL letter.
(c) Transit Employee Protective Requirements for Projects Authorized by 49 U.S.C. $\S 5311$ in Nonurbanized Areas
- If the contract involves transit operations financed in whole or in part with Federal assistance authorized by 49 U.S.C. § 5311 , the Contractor agrees to comply with the terms and conditions of the Special Warranty for the Nonurbanized Area Program agreed to by the U.S. Secretaries of Transportation and Labor, dated May 31, 1979, and the procedures implemented by U.S. DOL or any revision thereto.

The Contractor also agrees to include the applicable requirements in each subcontract involving transit operations financed in whole or in part with Federal assistance provided by FTA.

## 28. DISADVANTAGED BUSINESS ENTERPRISE (DBE) (49 CFR Part 26 )

a. This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10\%. The agency's overall goal for DBE participation is $\mathbf{8} \%$. The FTA DBE goal for architectural, engineering services and construction contracts is $11 \%$. The DBE goal is $2 \%$ for marine contracts.
b. The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the City deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

Bidders/offerors are required to document sufficient DBE participation to meet these goals or, alternatively, document adequate good faith efforts to do so, as provided for in 49 CFR 26.53. Award of this contract is conditioned on submission of the following:

1. The names and addresses of DBE firms that will participate in this contract;
2. A description of the work each DBE will perform;
3. The dollar amount of the participation of each DBE firm participating;
4. Written documentation of the bidder/offeror's commitment to use a DBE subcontractor whose participation it submits to meet the contract goal;
5. Written confirmation from the DBE that it is participating in the contract as provided in the Contractor's commitment;
6. If the contract goal is not met, evidence of good faith efforts should be provided by the City. The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance;
7. The Contractor is required to pay its Subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the Contractor's receipt of payment for that work from the City. In addition, the Contractor may not hold retainage from its Subcontractors. The Contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed. The Contractor is required to return any retainage payments to those Subcontractors within 30 days after incremental acceptance of the Subcontractor's work by the City and Contractor's receipt of the partial retainage payment related to the Subcontractor's work; and
8. The Contractor must promptly notify the City, whenever a DBE Subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE Subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE Subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of the City.

## 30. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS (FTA CIRCULAR 4220.1F)

The preceding provisions include, in part, certain Standard Terms and Conditions required by USDOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by USDOT, as set forth in FTA Circular 4220.1F are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Contract. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any of the City's requests which would cause the City to be in violation of the FTA terms and conditions.

## 31. DRUG AND ALCOHOL TESTING (49 U.S.C. 5331, 49 CFR Parts 653 and 654)

FTA's drug and alcohol rules, 49 CFR 653 and 654 , respectively, are unique among the regulations issued by FTA. First, they require that the City ensures that any entity performing a safety-sensitive function on the City's behalf (usually Contractor and/or Contractors) implement a complex drug and alcohol testing program that complies with Parts 653 and 654. Second, the rules condition the receipt of certain kinds of FTA funding on the City's compliance with the rules; thus, the City is not in compliance with the rules unless every entity that performs a safety-sensitive function on the City's behalf is in compliance with the rules. Third, the rules do not specify how the City ensures that its Contractors comply with them.

How the City does so depends on several factors, including whether the Contractor is covered independently by the drug and alcohol rules of another Department of Transportation operating administration, the nature of the relationship that the City has with the Contractor, and the financial resources available to the City to oversee the Contractor's drug and alcohol testing program. In short, there are a variety of ways that the City can ensure that it's Contractor and/or contractors comply with the rules.

The Contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, produce any documentation necessary to establish its compliance with Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of New York, or the City, to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The Contractor agrees further to certify annually its compliance with Parts 653 and 654 before January $30^{\text {th }}$ and to submit the Management Information System (MIS) reports before March $15^{\text {th }}$ to the Commissioner of the City or his/her designee. To certify compliance, the Contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register.

The Contractor agrees further to [Select a, b, or c] (a) submit upon request a copy of the Policy Statement developed to implement its drug and alcohol testing program; OR (b) adopt the City's policy statement as required under 49 CFR 653 and 654; OR (c) submit for review and approval to the City, a copy of its Policy Statement developed to implement its drug and alcohol testing program. In addition, the Contractor agrees to: (to be determined by the City, but may address areas such as: the selection of the certified laboratory, substance abuse professional, or Medical Review Officer, or the use of a consortium).

## 32. INTELLIGENT TRANSPORTATION SYSTEM (ITS)

Intelligent transportation system property and services must comply with the National ITS Architecture and Standards to the extent required by Section 5307 (c) of SAFETEA-LU, FTA Notice, "FTA National ITS Architecture Policy on Transit Projects," 66 FR 1455 et seq., January 8, 2001, and later published policies or implementing directives FTA may issue.

## 33. AMERICANS WITH DISABILITIES ACT (ADA) FOR ROLLING STOCK

Rolling stock must comply with the accessibility requirements of USDOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 CFR Part 37, and Joint Architectural Transportation Barriers Compliance Board (ATBCB)/USDOT regulations, "Americans with Disabilities (ADA)
Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38. Private entities must comply with the requirements of 49 CFR Part 37 applicable to public entities with which they contract to provide public transportation services. The City advises third party contractors operating public transportation services to review the requirements for public entities in this context.

## Appendix A <br> BUY AMERICA CERTIFICATION

## Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. $5323(j)(1)$
The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 CFR Part 661.

Date $\qquad$

Signature $\qquad$
Company Name $\qquad$
Title $\qquad$
Certificate of Non-Compliance with 49 U.S.C. $5323(j)(1)$
The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1), but it may qualify for an exception pursuant to 49 U.S.C. $5323(\mathrm{j})(2)(\mathrm{B})$ or $(\mathrm{j})(2)(\mathrm{D})$ and the regulations in 49 CFR 661.7.

Date $\qquad$
Signature $\qquad$
Company Name $\qquad$
Title $\qquad$
Certification requirement for procurement of buses, other rolling stock and associated equipment.
Certificate of Compliance with 49 U.S.C. $5323(j)(2)(C)$.
The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 CFR Part 661.

Date $\qquad$
Signature $\qquad$
Company Name $\qquad$
Title $\qquad$

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)
The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C), but may qualify for an exception pursuant to 49 U.S.C. $5323(\mathrm{j})(2)(\mathrm{B})$ or (j)(2)(D) and the regulations in 49 CFR 661.7.

Date $\qquad$
Signature $\qquad$
Company Name $\qquad$
Title $\qquad$

## Appendix A1

## DISCLOSURE OF LOBBYING ACTIVITIES

I
name and title of company representative
hereby certifies on behalf of $\qquad$
that will file the certification required by 49 CFR Part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

The Contractor certifies, to the best of his or her knowledge and belief, that:
(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an 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.
(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to 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, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96).
(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that shall certify and disclose accordingly.

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 (as amended by the Lobbying Disclosure Act of 1995). 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.

Pursuant to 31 U.S.C. § 1352 (c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $\$ 10,000$ and not more than $\$ 100,000$ for each such expenditure or failure.

The Contractor, $\qquad$ , certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801 , et seq., apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official
Name and Title of Contractor's Authorized Official
Date

## Appendix A2

## CERTIFICATION OF A CONTRACTOR REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

The Contractor $\qquad$ , certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this proposal or bid had one or more public transactions (Federal, State or Local) terminated for cause or default.
5. The Contractor agrees to provide the City with immediate written notice if, at any time, it learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. Each Subcontractor or Vendor for the Contractor shall provide the same updated notice to the Contractor and the Contractor shall be solely responsible for collecting, updating and submitting updated information to the City.

NOTE: If for any reason the Contractor is unable to certify to any of the statements in this certification, the Contractor shall attach an explanation to this certification.

THE CONTRACTOR, U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

[^7]Date

## Appendix A3

## CERTIFICATION OF A SUBCONTRACTOR/SUPPLIER REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

The Subcontractor/Supplier $\qquad$ , certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this proposal or bid had one or more public transactions (Federal, State or Local) terminated for cause or default.
5. The Subcontractor agrees to provide the Contractor with immediate written notice if, at any time, it learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. Each Subcontractor or Vendor for the Contractor shall provide the same updated notice to the Contractor and the Contractor shall be solely responsible for collecting, updating and submitting updated information to the City.

NOTE: If for any reason the Subcontractor/Supplier is unable to certify to any of the statements in this certification, the Contractor shall attach an explanation to this certification.

THE SUBCONTRACTOR/SUPPLIER,
CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

Signature and Title of Authorized Official

## Date

## Contractor Note:

Contractor must require all Subcontractors/Suppliers to complete this certification and Contractor shall submit the certifications to the City as they are received.

## Appendix B

## REQUIRED CONTRACT PROVISIONS

## DBE Program

FTA assisted contracts that the City lets will include, as appropriate, the model contract provisions that are included as Appendix B and incorporated herein. NYCDOT shall have discretion to modify the provisions for particular contracts as needed. These required contract provisions consist of:

1. Notice of DBE Contract Requirements in the Invitation for Bids and/or Request For Proposals
2. General Conditions
a. Assurances
b. DBE Policy
c. DBE Obligation
d. Prompt Payment to Subcontractors
e. Legal and Contract Remedies
f. Contractor Reporting Requirements
g. Retainage Policy

## 1. Notice of DBE Contract Requirements in the Invitation for Bids

This contract is subject to the Federal Transit Administration (FTA) requirements for implementing the U.S. Department of Transportation (USDOT) regulations for the following areas:

## Disadvantaged Business Enterprise (DBE) Requirements

The successful Proposer/Bidder will be required to meet a NYCDOT Disadvantaged Business Enterprise (DBE) goal. For Engineering Services and Construction a goal of $11 \%$ is currently in effect, for Marine work a DBE goal of $2 \%$ goal is in effect. The goal is based on the total value of the contract, which should be subcontracted to a DBE firm or firms. To be qualified as a DBE, a firm should be certified in the NYSUCP, in accordance with Federal Regulation 49 CFR Part 26. Application for certification can be obtained at:

MTA - New York City Transit, Office of Business Programs, 2 Broadway- $16^{\text {th }}$ Floor, New York, NY 10004 Telephone (646) 252-1378

New York State DOT, Office of Equal Opportunity Development \& Compliance, 50 Wolf Road $1^{\text {st }}$ Floor, Albany, New York 12232 Telephone (518) 457-1129

Port Authority of NY \& NJ, Office of Business \& Job Opportunity
233 Park Avenue South, $4^{\text {th }}$ Floor, New York, NY 10003-1604 Telephone (212) 435-7821
Niagara Frontier Transportation Authority
181 Ellicott Street, Buffalo, New York 14203 Telephone (716) 855-7300
Disadvantaged Business Enterprise (DBE) Certification
Only firms certified by the NYS Unified Certification Program (NYSUCP) as DBEs are eligible to be used by the contractor in order to meet the DBE participation goal set on a NYCDOT Federally funded contract.

The NYSUCP Directory can be found at: http://www.nysucp.net

## 2. General Conditions

All applicants and recipients shall agree to abide by the statements in paragraphs (a) through(e) listed below:

## a. Assurances - Section 26.13

Each financial assistance agreement signed with a NYCDOT operation administration (of a primary recipient) must include the following assurance:

The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT- assisted contract or in the administration of its DBE program or the requirements of $49 C F R$ Part 26 . The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT- assisted contracts. The recipient's DBE program, as required by 49 $C F R$ part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et. seq.).

Each prime contractor signed with a subcontractor and/or each subcontractor signed to a contractor must include the following assurance:

The contractor, sub -recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

## b. DBE Policy

It is the policy of USDOT that DBEs as defined in 49 CFR Part 26 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the DBE requirements of 49 CFR Part 26 apply to this agreement."

## c. DBE Obligation

The recipient or its contractor agrees to ensure that DBEs as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that DBEs have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of US DOT assisted contracts.

Because this is a federally funded project with its own DBE requirement no separate NYC M/WBE program condition will apply to this contract. Further information or questions can be directed to:

New York City Department of Transportation
ACCO Office of Contract and Compliance
55 Water Street
$8^{\text {th }}$ Floor
New York, New York 10041
Attn: Charles Bartolotta, DBE Contract Compliance Officer

## d. Prompt Payment to Subcontractors

In accordance with NYCDOT's DBE Program, the Contractor shall pay all Subcontractors for work that has been satisfactorily performed no later than thirty (30) days from the date of the Contractor's receipt of progress payments by the City unless a shorter duration is stated elsewhere in the contract. Within thirty (30) days of satisfactory completion of all work payment is required to be paid to the Subcontractor. Contractor shall release any retainage payments withheld, if any, to the Subcontractor at the time of satisfactory acceptance of work

## e. Legal and Contract Remedies

The DBE Compliance Unit shall monitor and track the actual DBE participation through contractor and subcontractor reports of payments, and other appropriate monitoring, as further described in this Program Plan. The DBE Representative shall ensure that DBE participation is counted toward contract goals and the overall annual goal in accordance with the Regulations. In accordance with 49 CFR Part 26, prime contractors may not terminate sub-contractors for convenience. When DBE contractors are terminated, prime contractors will be required to substitute DBE sub-contractors in order to meet its DBE commitment.

The City will monitor compliance of its contractors on FTA assisted contracts within the requirements of the Regulations and the DBE Program. The City may impose such contract remedies as are available under federal, state and local law and regulations for non-compliance. Such remedies may include, but are not limited to, withholding of progress payments and contract retentions, imposition of liquidated damages, and termination of the contract in whole or in part.

## f. Contractor Reporting Requirements

NYCDDC is required to utilize the NYCDOT DBE Program Plan and comply with USDOT regulations 49 CFR Part 26.

NYCDDC, its contractors and subcontractors are subject to contract compliance reviews to ensure that DBE requirements are being met. They are expected to cooperate with the NYCDOT DBE Representative during desk audits and / or on-site reviews. NYCDOT has a Field Representative responsible for project oversight to ensure that contract work is being performed by designated DBE sub-contractors and that the NYCDDC Project Accountant tracks payments to ensure that project goals, when applicable, are followed. The Compliance Officer, and Field Representative also reports work and payment progress to the Project Accountant who then tracks DBE utilization with the DBE Representative. The DBE Compliance Officer and DBE Representative ensure that sub-contractor DBE participation is credited to overall goals after the DBE has received payments.

## A sample of our DBE Commitment Letter specifying the Prime Contractors DBE Responsibilities is attached as Appendix E.

## g. Retainage Policy

NYCDOT has made a determination that NO RETAINAGE WILL BE HELD ON FTA FUNDED CONTRACTS.

NYCDDC must ensure prompt and full payment from the Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed.

For purposes of this section, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the recipient. When a recipient has made an incremental acceptance of a portion of a contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

## Appendix C

## DETERMINING GOOD FAITH EFFORTS

To determine whether a bidder that has failed to meet the DBE contract goal(s) may receive the contract, the Department will decide whether the efforts the Bidder made to obtain DBE participation were "good faith efforts" to meet the goal(s). Efforts that are merely pro forma are not good faith efforts to meet the goal(s). Efforts to obtain DBE participation are not good faith efforts to meet the goal(s), even if they are sincerely motivated, if, given all relevant circumstances, they could not reasonably be expected to produce a level of DBE participation sufficient to meet the goal(s).

In order to evaluate the Bidder's conformance to this subsection, the Department will consider the quality, quantity, and intensity of the different kinds of efforts that the Bidder has made. The following is a list of the types of actions which the Department will consider as part of the Bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exhaustive or exclusive. Other factors or types of efforts may be relevant in appropriate cases.

The following is a list of the kinds of efforts that the City will evaluate to determine if the Bidder has demonstrated a good faith effort:

1. Efforts to secure participation by certified DBE firms for work that they are listed to perform that is in the contract. Only DBEs certified by the NYSUCP shall be used to fulfill the established goal on Federal-Aid contracts.
2. Soliciting through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The Bidder shall solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The Bidder shall determine with certainty if the DBEs are interested by taking appropriate steps to follow up on initial solicitations.
3. $a$. The Bidder shall, at a minimum, seek certified DBEs in the same geographic region where the contract is located. This is defined as a one hundred (100) kilometer radius around the city, town or borough where the contract is located as identified in the contract proposal. For specialty work such as pavement markings, guide rail, etc. (as defined in the contract proposal) the Bidder shall, at a minimum, solicit on an upstate or downstate basis, depending upon the location of the contract.
b. The Department has facilitated identification of upstate, downstate and areas within a 100 km radius through its NYSUCP website, which is accessible on the Internet at www.nysucp.net For more information contact the NYCDOT at (212) 839-9411. For bidders who do not have internet capability, a hard copy solicitation report for a specific contract can be requested by contacting the Office of Contract and Compliance Unit at (212) 839-9411.
4. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goal(s) will be achieved. This includes, where appropriate, either breaking down operations within the contract or combining like or related operations in the contract into logistically and economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
5. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
6. a. Negotiating in good faith with interested DBEs. It is the Bidder's responsibility to make a portion of the work available to DBE's Subcontractors and material suppliers and to select those portions of the work or material needs consistent with the available DBE's Subcontractors and material suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
b. The fact that there may be some additional cost involved in finding and using DBEs is not itself sufficient reason for a bidder's failure to meet contract DBE goal(s), as long as such cost are reasonable. The ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the Bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
7. Not rejecting DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.
8. Making efforts to assist interested DBEs in obtaining bonding, lines of credit or insurance as required by the City.
9. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance.
10. Effectively using the services of available disadvantaged business focused media, trade associations, and contractors' groups; local, state, and Federal disadvantaged business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
11. All bidders shall keep records of efforts to solicit and negotiate with DBEs, using the Solicitation Log as a continuing record of pre- and post-letting solicitation activity. When submitting a DBE Schedule of Utilization to the City, the Apparent Low Bidder will attach the $\log$, together with the supplemental information specified in the instructions for the Solicitation Log as evidence of good-faith efforts when the established DBE goal(s) for the contract have not been met utilizing certified DBEs. Such supplemental efforts shall include at least the following:
a. All envelopes of solicitation inquires that were returned as undeliverable; and
b. Any quotations submitted by DBEs that are not included in the DBE Schedule of Utilization with an explanation for the Bidder's action in case.
12. Promptly executing an agreement with DBE Subcontracts/vendors.

The DBE Compliance Officer will review the data submitted under this section to determine whether the DBE requirements have been satisfied through good faith efforts.

## Appendix D

## PROMPT PAYMENT AFFIDAVIT

## (SAMPLE PRIME CONTRACTOR PROMPT PAYMENT AFFIDAVIT)

Contractor will place a check in the appropriate box below that applies to this payment request.

Re: Payment Request No. $\qquad$
I, $\qquad$ (Name), the $\qquad$
(Title - e.g., President, Vice President, etc.) of $\qquad$ ("Company"), do state the following with regard to payments made under Contract No. ("Contract"):

1. ___Subcontractors, at the first tier, both DBE and non-DBE, who completed work and were listed for payment on the prior Payment Request No. $\qquad$ , were paid no later than thirty (30) business days after Company received payment from the City.
2. ___Copies of invoices and cancelled checks for subcontractors at the first tier who were paid under the prior payment request have been delivered or mailed to NYCDDC/NYCDOT Contract Compliance Department. In addition, the Company has attached to the current Payment Request all liens and or waivers for prior subcontractor payments and any other documentation required by the City. (Failure to attach all required documentation to the Payment Request or forward cancelled checks and invoices to NYCDDC/ NYCDOT Contract Compliance Department may cause the Payment Request to be rejected by the City).
3. $\qquad$ There was no delay in or postponement of any payment owed to a DBE subcontractor, whether periodic payment or retainage amount, except for good cause and after receipt of prior written approval from the City

Company Name

Signature

Print Name

Date: $\qquad$

Subscribed and sworn to before me this $\qquad$ day of $\qquad$ 20 _.
$\qquad$

[^8]
## Appendix E

## SAMPLE PRIME CONTRACTOR AWARD LETTER

## Date

Prime Contractor Winner, Inc.
Attn: Mr. Buck Stops Here, President
1111 Bottom Line Street
Anywhere, New York 10000
Re: Contract Name and/or Description
Dear Mr. John Doe:
Your Company was awarded and recently executed the above listed contract with NYCDOT. Part of the consideration in awarding the contract was the Disadvantaged Business Enterprise (DBE) participation that you listed in the bid/proposal document.
Please be advised that you will be required to meet your Disadvantaged Business Enterprise Goals of $11 \%$
You have listed the following DBE firm(s) and the dollar amounts of their subcontracts:

| ABC Electrical Co. | Electrical Contracting | $\mathbf{\$ x x}, \mathbf{x x x}$ |
| :--- | :--- | :--- |
| DEF Plumbing | Plumbing Contracting | $\mathbf{\$ x x}, \mathbf{x x x}$ |
| GHI Roofing | Roofing Contracting | $\mathbf{\$ x x}, \mathbf{x x x}$ |
| JKL Printing Co. | Printing | $\mathbf{\$ x x}, \mathbf{x x x}$ |

The DBE firm(s) listed above represent(s) your commitment to NYCDOT's DBE program and each respective DBE firm.

To ensure the integrity of the DBE program, NYCDOT has developed DBE compliance procedures that should be followed during this contract. NYCDOT's DBE Department and Contract Administrator should be notified in writing prior to any material changes from the above commitments. Also, any changes should be for real and substantial reasons. Frivolous and/or unsubstantiated changes are unacceptable.

Please provide to the DBE Department, within 3 calendar days of execution, a copy of your executed subcontract with each DBE firm. A letter of commitment signed by both an authorized representative of your firm and the DBE firm may be submitted instead of signed subcontracts. The letter should verify the subcontract dollar amount, the general work scope, and affirm the absence of subcontract restrictions or requirements that are unfair, burdensome, outside of normal business practices, uniustly punitive, etc. There should be a letter for each DBE firm.

Also, you must attach NYCDOT's DBE Expenditure Report (see contract compliance manual) with each invoice/payment request that you submit to NYCDOT's Contract Administrator. This report is designed to provide an accounting of monthly and year-to-date payments made to the DBE firm(s) that you have subcontracted with above.

The DBE Expenditure Report reflects the dollars that will be paid to each DBE firm from your submitted invoice/payment request. Evidence of payments (i.e. copy of canceled checks, copy of check register, etc.) may be periodically requested. NYCDOT may not authorize payment unless the DBE Expenditure Report accompanies your invoice/payment request.

Finally, please submit a DBE projected work schedule (i.e. a breakdown by month of expected DBE activity). Updates of the projected work schedule should be submitted as needed over the life of the contract.

Failure to comply may result in breach of contract and it may jeopardize future contracts with NYCDOT. If you have any questions you may contact NYCDOT's Contract Compliance Unit at (212) 839-9411 or email us at accomail@dot.nyc.gov.

Thank you for your continued commitment and cooperation.
Cordially,

## DBE Administrator

cc: Every DBE Firm Listed Above
Appropriate Project Manager, NYCDOT
Contracts Administrator, NYCDOT
Purchasing Administrator, NYCDOT
DBE File, NYCDOT
Others As Needed

## Appendix F

## MINORITY OWNED FINANCIAL INSTITUTIONS

All contractors are encouraged to use Minority Owned Financial Institutions. A list can be found at http://www.federalreserve.gov/releases/mob/.

## Appendix G

## PREVAILING WAGE RATES

## CURRENT DAVIS-BACON PREVAILING WAGE RATES

Bidders and the selected Contractor, if any, shall be responsible for confirming and adhering to the actual Davis-Bacon Wage Rates in effect at any time after the issuance of this IFB including, without limitation, during the Contract Term. Federal Davis-Bacon Wage Rates may be accessed through the U.S. Department of Labor's Website at: http://www.wdol.gov/wdol/scafiles/davisbacon/ny.html.

General Decision Number: NY150003 11/13/2015 NY3
Superseded General Decision Number: NY20140003
State: New York
Construction Types: Building, Heavy, Highway and Residential

Counties: Bronx, Kings, New York, Queens and Richmond Counties in New York.

BUILDING \& RESIDENTIAL CONSTRUCTION PROJECTS (includes single family homes and apartments up to and including 4 stories), HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $\$ 10.10$ for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $\$ 10.10$ (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.


|  | Rates | Fringes |
| :---: | :---: | :---: |
| Pointer, cleaner and caulker. | \$ 48.62 | 24.82 |
| BRNY0004-001 07/01/2015 |  |  |
|  | Rates | Fringes |
| MARBLE MASON. . . . . . . . . . . . . | \$ 56.53 | 30.29 |
| BRNY0007-001 07/01/2015 |  |  |
|  | Rates | Fringes |
| TERRAZZO FINISHER............ <br> TERRAZZO WORKER/SETTER. | $\begin{aligned} & \$ 9.14 \\ & \$ \quad 50.75 \end{aligned}$ | 31.49 31.49 |
| BRNY0020-001 07/01/2015 |  |  |
|  | Rates | Fringes |
| MARBLE FINISHER. . . . . . . . . . . . | \$ 45.08 | 29.65 |
| BRNY0024-001 07/01/2015 |  |  |
|  | Rates | Fringes |
| BRICKLAYER <br> MARBLE POLISHERS......... | $\$ 39.50$ | 23.25 |
| BRNY0052-001 06/01/2015 |  |  |
|  | Rates | Fringes |
| Tile Layer. . . . . . . . . . . . . . . | \$ 47.15 | 24.74 |
| BRNY0088-001 06/01/2014 |  |  |
|  | Rates | Fringes |
| TILE FINISHER. . . . . . . . . . . . | \$ 40.78 | 27.86 |
| CARP0001-009 07/01/2015 |  |  |
|  | Rates | Fringes |
| CARPENTER <br> Carpenters <br> Soft Floor Layers..... | $\begin{aligned} & \$ 50.50 \\ & \$ 50.50 \end{aligned}$ | $\begin{aligned} & 45.95 \\ & 45.18 \end{aligned}$ |
| CARP0740-001 07/01/2015 |  |  |
|  | Rates | Fringes |
| MILLWRIGHT . . . . . . . . . . . . . . . . . | \$ 49.50 | 51.31 |
| CARP1556-006 07/01/2015 |  |  |
|  | Rates | Fringes |
| Dock Builder \& Piledrivermen DOCKBUILDERS. . . . . . . . . . . | $\$ 50.50$ | 45.95 |
| CARP1556-007 07/01/2015 |  |  |
|  | Rates | Fringes |
| Diver Tender <br> Diver. | $\begin{aligned} & \$ 5.47 \\ & \$ \quad 63.82 \end{aligned}$ | $\begin{aligned} & 45.95 \\ & 45.95 \end{aligned}$ |
| CARP1556-011 07/01/2015 |  |  |
|  | Rates | Fringes |
| Carpenters: TIMBERMEN. . . . . . . . . . . . . . | $\$ 45.60$ | 45.97 |
| ELEC0003-001 05/13/2015 |  |  |

```
ELECTRICIAN
    Electricians...............$ 54.00 61.871%
    Jobbing, and maintenance 
    15.13+a
PAID HOLIDAYS:
    a. New Years Day, Martin Luther King, Jr.'s Birthday,
    Washington's Birthday, Memorial Day, Independence Day,
    Labor Day, Columbus Day, Election Day, Thanksgiving Day,
    the day after Thanksgiving Day, and Christmas Day
```



```
    ELEC1049-001 03/29/2015
QUEENS COUNTY
Rates Fringes
Line Construction (Substation
and Switching structures pipe
type cable installation and
maintenance jobs or projects;
Railroad electrical
distribution/transmission
systems maintenance (when
work is not performed by
railroad employees) Overhead
and Underground
transmission/distribution
line work. Fiber optic,
telephone cable and equipment)
    Groundman................$ 30.46 21.08
    Heavy Equipment Operator.....$}
    Lineman and Cable Splicer...$ 50.76 27.58
    Tree Trimmer.............$ 30.09 14.12
    ELEV0001-002 03/17/2013
        Rates Fringes
ELEVATOR MECHANIC
    Elevator Constructor........$57.01 27.605+a+b
    Elevator constructor......$ 5%..$ 45.14 2...$
FOOTNOTE :
```

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after
Thanksgiving, and Christmas Day.
b. PAID VACATION: An employee who has worked less than 5 years shall recieve vacation pay credit on the basis of $4 \%$ of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of $6 \%$ of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive vacation pay credit on the basis of $8 \%$ of his hourly rate for all hours worked.

ENGI0014-001 07/01/2013

> Rates Fringes


```
            GROUP 2.................... $ 70.10 28.65
            GROUP 3...................$72.34 28.65
            GROUP 4...... . . . . . . . . . . . . .$ 70.63 28.65
            GROUP 5...................$ 69.23 28.65
            GROUP 6....................$ 66.45 28.65
            GROUP 7.................$ 67.70 28.65
            GROUP 8...................$ 65.76 28.65
            GROUP 9..................$ 64.34 28.65
Steel erector
    Compressors, Welding
    Machines.....................$ 41.84
    Cranes, Hydraulic Cranes,
    2 drum derricks,
    Forklifts, Boom Trucks......$70.50 28.65
    Three drum derricks........$ 73.37 28.65
Utility Laborer
    Horizontal Boring Rig.......$ 62.53 28.65
    Off shift compressors.......$ 51.93 28.65
    Utility Compressors........$41.18 28.65
POWER EQUIPMENT OPERATOR CLASSIFICATIONS
GROUP 1: Tower crane
    GROUP 2: Backhoes, power shovel, Hydraulic clam shells, moles
    and machines of a similar type
GROUP 3: Mine hoists and crane, etc. used as mine hoists
    GROUP 4: Gradalls, keystones, cranes (with digging buckets),
    bridge cranes, trenching machines, vermeer cutter and
    machines of a similar nature
GROUP 5: Piledrivers, derrick boats, tunnel shovels
GROUP 6: All drills, and machines of a similar nature
    GROUP 7: Back filling machines, cranes, mucking machines,
    dual drum pavers
    GROUP 8: Mixers (concrete w/loading attachments), concrete
    pavers, cableways, land derricks, power house (low pressure
    units), concrete pumps
    GROUP 9: Concrete plants, well drilling machines, stone
    crushers double drum hoist, power house (other than above)
GROUP 10: Concrete mixers
GROUP 11: Elevators
    GROUP 12: Concrete breaking machine, Hoists (single drum),
    load masters, locomotive and dinkies over 10 tons
GROUP 13: Vibratory console
    GROUP 14: Compressors (portable 3 or more in battery), tugger
    machine (caissons), well point pumps, chum drill
    GROUP 15: Boilers, (high pressure, compressors (portable,
    single, or 2 in battery, not over 100' apart), pumps (river
    cofferdam and welding machines (except where arc is
    operated by members of local 15) push button machines, all
    engines irrespective of power (power pac) used to drive
    auxilliary equipment, air, hydraulic etc.
PREMIUMS ON CRANES (Crawler or Truck) :
\(100^{\prime}\) to \(149^{\prime}\) boom - add . 50
\(150^{\prime}\) to \(249^{\prime}\) boom - add .75
\(250^{\prime}\) to \(349^{\prime}\) boom - add 1.00
\(350^{\prime}\) to \(450^{\prime}\) boom - add 1.50
Premiums for Cranes on Steel Erection:
\(100^{\prime}\) to \(149^{\prime}\) boom - add 1.75
\(150^{\prime}\) to 249' boom - add 2.00
\(250^{\prime}\) to \(349^{\prime}\) boom - add 2.25
\(350^{\prime}\) to \(450^{\prime}\) boom - add 2.75
Tower crane
FOOTNOTE:
    a. Paid Holidays: New Year's Day; Lincoln's Birthday;
```

Washington's Birthday; Memorial Day; Independence Day;
Labor Day; Veterans Day; Columbus Day; Election Day;
Thanksgiving Day; and Christmas Day; provided the employee
works one day the payroll week in which the holiday occurs.
ENGIOO14-002 07/01/2013
Rates Fringes
Power Equipment Operator
BUILDING \& RESIDENTIAL
GROUP $1 \ldots .$. .................... $65.83 \quad 28.65+$ a
GROUP 2....................... $69.74 \quad 28.65+a$

GROUP $4 \ldots . . . . . . . . . . .$. . $\$ 57.82 \quad 28.65+a$
GROUP 5....................... $43.28 \quad 28.65+a$
POWER EQUIPMENT OPERATORS CLASSIFICATIONS
GROUP 1: Double drum
GROUP 2: Stone derrick, cranes, hydraulic cranes, boom
trucks
GROUP 3: 4 pole Hoist, Single Drum Hoists
GROUP 4: Fork lift, house cars, plaster (platform machine), plaster bucket, concrete pump and all other equipment used for hoisting material

GROUP 5: Compressors, welding machines (cutting concrete work), paint spraying, sand blasting, pumps (with the exclusion of concrete pumps), house car (settlement basis only), all engines irrespective of power (power pac) used to drive auxiliary equipment, air, hydraulic, etc., boilers
Premiums for Cranes:

| $100^{\prime}-149 '$ | boom - add | 1.75 |
| :--- | :--- | :--- |
| $150^{\prime}-249^{\prime}$ | boom - add | 2.00 |
| $250^{\prime}-349^{\prime}$ | boom - add | 2.25 |
| $350^{\prime}-450^{\prime}$ boom - add | 2.75 |  |
| Tower cranes |  |  |

FOOTNOTE:

> a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

```
IRONOO40-002 07/01/2015
```

BRONX, NEW YORK, RICHMOND

|  | Rates | Fringes |
| :---: | :---: | :---: |
| IRONWORKER, STRUCTURAL. . . . | \$ 48.75 | 67.34 |
| IRON0046-003 07/01/2014 |  |  |
|  | Rates | Fringes |
| IRONWORKER |  |  |
| METALLIC LATHERS AND REINFORCING IRONWORKERS | $\$ 40.60$ | 30.56 |
| IRON0197-001 06/01/2013 |  |  |
|  | Rates | Fringes |
| IRONWORKER <br> STONE DERRICKMAN. |  |  |
|  | 41.00 | 36.57 |
| IRON0361-002 07/01/2015 |  |  |
| KINGS, QUEENS |  |  |



## LABORERS

BUILDING CONSTRUCTION ASBESTOS (Removal, Abatement, Encapsulation or Decontamination of asbestos); LEAD; \& HAZARDOUS WASTE LABORERS (Hazardous Waste, Hazardous Materials, Biochemical and Mold Remediation, HVAC, Duct $\begin{array}{lll}\text { Cleaning, Re-spray } \\ \text { Fireproofing, etc) ......... } \$ 35.90 & 14.75\end{array}$ LABOOO79-001 01/01/2015

> Rates Fringes

Laborers Building Construction


## CLASSIFICATIONS

TIER A: Responsible for the removal of all interior petitions and structural petitions that can consist of sheet rock, block or masonry. Also, all structural slab openings for ducts, mechanical, shafts, elevators, slab openings and exterior walls where the building is not being completely demolitioned.
TIER B: Responsible for shoveling of debris into containers, pushing containers from the inside to the outside of the building.

Maintenance Men, Inside Muck Lock Tenders, Pump Men, Electricians, Cement Finishers, Caulkers, Hydraulic Men, Shield Men, Monorail Operators, Motor Men, Conveyor Men, Powder Carriers, Pan Men, Riggers, Chuck Tenders, Track Men Painters, Nippers, Brakemen, Cable Men, Hose Men, Grout Men, Gravel Men, Form Workers, Concrete Workers, Tunnel Laborers, Mole Nipper (one (1) Mole Sipper per Working Shaft per Shift for up to and including Two (2) Moles

```
    LABO0731-001 07/01/2014
```

Rates Fringes
LABORER
Building, Heavy and
Residential Construction
LABORER: (Asbestos, Lead,
Hazardous Waste Removal
(including
SOil)/CEMENT/CONCRETE . . . . . \$ $39.85 \quad 34.78$
UTILITY LABORER. . . ......... $\$ 39.70$
34.78
Paid Holidays: Labor Day and Thanksgiving Day
LABO1010-001 07/01/2011
Rates Fringes
Laborers:
HIGHWAY CONSTRUCTION
Fence Installer \& Repairer. $\$ 38.34 \quad 30.25$
FORMSETTERS................. 42.21 30.25

Landscape Planting \&
Maintenance................\$38.34 30.25
$\begin{array}{ll}\text { Maintenance Safety Surface. \$ } 38.34 & 30.25\end{array}$
$\begin{array}{lll}\text { Slurry/sealcoater/Play } \\ \text { Equipment Installer.......\$ } 38.34 & 30.25\end{array}$
$\begin{array}{lll}\text { Equipment Installer........\$38 } & 38.34 & 30.25 \\ \text { Small Equipment Operator }\end{array}$
(Not Operating Engineer)... $\$ 38.34$
30.25
$\begin{array}{lll}\text { Small Power Tools Operator. } \$ 38.34 & 30.25 \\ 30.25\end{array}$
FOOTNOTES:
a. PAID HOLIDAYS: Memorial Day, Fourth of July, Labor Day, Columbus Day, Election Day and Thanksgiving Day, provided the employee has worked one (1) day in the calendar week in which the said holiday occurs.

```
LABO1010-002 07/01/2011
```

|  | Rates | Fringes |
| :---: | :---: | :---: |
| Laborers-Asphalt Construction: |  |  |
| Micro Paver. | 44.86 | 30.25 |
| Raker. | 44.37 | 30.25 |
| Screedperson. | 44.86 | 30.25 |
| Shoveler (Production |  |  |
| Paving Only)............. | 41.08 | 30.25 |
| Small Equipment Operator |  | 30.25 |
| (Asphalt) | 41.08 | 30.25 |

PAIN0009-001 11/01/2014


[^9]
## Rates Fringes

Painters:
Structural Steel and Bridge. $\$ 49.00$
PAIN1974-001 $12 / 26 / 2012$

Service Fitter work shall consist of all repair, service and maintenance work on domestic, commercial and industrial refrigeration, air conditioning and air cooling, stoker and oil burner apparatus and heating apparatus etc., including but not exclusively the charging, evacuation, leak testing and assembling for all machines for domestic, commercial and industrial refrigeration, air conditioning and heating apparatus. Also, work shall include adjusting, including capacity adjustments, checking and repairing or replacement of all controls and start up of all machines and repairing all defects that may develop on any system for domestic, commercial and industrial refrigeration and all air conditioning, air cooling, stoker and oil burner apparatus and heating apparatus regardless of size or type.

ROOF0008-003 07/01/2014

|  | Rates | Fringes |
| :---: | :---: | :---: |
| ROOFER. | 40.70 | 25.14 |
| SHEE0028-002 07/31/2014 |  |  |
|  | Rates | Fringes |

Rates Fringes
TRUCK DRIVER
Asphalt...................... 39.96
Euclids \& Turnapulis........ 40.06
High Rise................... 48.36

FOOTNOTES:
PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veterans' Day (Armistice Day), Thanksgiving Day, Day after Thanksgiving and Christmas Day. Employees working two (2) days in the calendar week in which a holiday falls are to be paid for such holiday, provided that they shape each remaining workday during such calendar week.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.


Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type (s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).
Union Rate Identifiers
A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1 , 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers
Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates
the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

## Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100\% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

## WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210
2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

> Wage and Hour Administrator
> U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.
3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:
U.S. Department of Labor

200 Constitution Avenue, N.W.
4.) All decisions by the Administrative Review Board are final.
$==============================================================1$
END OF GENERAL DECISION

## STANDARD CLAUSES FOR ALL NEW YORK STATE CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinatter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State; whether a contractor, licensor, licensee, lessor, lessee or any other party):

1: EXECUTORX CLAUSE In accordance with Section 41 of the State Finance Law, the State shall have ne Liability under this contract to the Contractor or to anyone else beyond funids appropriated and available for this contract.
2. NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this confract may not be assigied by the Contractor or its right, title or interest thexein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractormay, however, assign its right to receive payment without the State's prior written consent unless this contract coneems Certificates of Participation pursuant to Article 5-A of the State Finance Law.
3. COMPTROLLER'S APPROYAL In accordance with Section 112 of the State Finance Eaw (or if this contract is with.the State University or City University of New York; Section 355 or Section 6218 of the Education Law), if this contract exceeds $\$ 15,000$ (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and.C.U.N.Y. contracts); or if this is an amendment for any amount to a contract which, as so amended, exceeds saild statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds $\$ 10,000$, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed $\$ 30,000$ (State Finance Law Section 163.6.a).
4. WORKERS' COMPENSATION BENEFTTS. In accordance with Section 142 of the State Finance Law, this contract shall be void aud of no forcee and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the pravisions of the Workers' Compensation Law.

## 5. NON-DISCRIMINATION REOURXEMENTS. To the extent required by Article 15 of the Executive Law (also

 known as the Human Rights Law) andall other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital stalus. Furthermore, in accordance with Section $220-e$ of the Labor Law, if this is a contract for the construction, alteration.or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New . York, Coutractor agrees that neither it nor its Subcoịtractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State eitizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its Subcontractors shall, by reason of race; creed; color, national origin; age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject fo fines of $\$ 50.00$ per person per day for any violation of Section 220 -e or Section 239 as well as possible termination of this contract.and forfeiture of all moneys due.: hereunder for a second or subsequent violation.6. WAGE AND. FOURS PROVISIONS, If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its Subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes; except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its Subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as .: determined by the State Labor Department in accordance with the Labor Law.
7. NON-COLXUSIVE BIDDING REOUIREMENT. In accordance with Section 139-d of the State Finance Law, if fhis contract was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warranis that at the time Contractor submitted its bid, an authorized and responsible person executed and delivered. to the State a non-collusive bidding certification on Contractor's behalf.
8. INTERNATLONAL BOYCOTT PROHIBITION. In accordance with Section 220 -f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds $\$ 5,000$, the Contractor agrees, as a material : condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partuersinip or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export.Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations theremider. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted on is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment' or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) buisiness days of such conviction, determination or disposition of appeal (2 NYCRR 105.4).
9. SEE-OIF RIGBTS. The State shall have all of its common law, equitable and statutory rights of setoff. These rights shall include, but not be limited to, the State's option to withhold for the purposes of setoff any moneys. cuue to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in. accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.
10. RECORDS. The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter or three (3) years after final payment, whichever is later. The State Comptroller, the Attorney Gexeral and any other person or entity authorized to conduct and examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contsactor within the State of New York or, if no such office is available, at a mutually agrecable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Recordis which are exempt from disclosure under Section 87 of the Public Officers Law. (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

## 11. IDENTIFYING INRORMATION AND PRIYACY NOTULCATION:

(A) Federal Employer Identiñation Number And/or Federal Social Security Number. All invoices or New. York State standard vouchers submitted for payment for the sale of goods of services or the lease of real or personal property to a New York State agency mast include the payee's identification number, i.e., the seller's or lessor's. identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on his invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.
(B) Privacy Notification. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is' found in Section 5 . of the State.Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory: The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax retiuns or may have understated their tax liabilities and to generally identify. persons affected by the taxes administered by the Commissioner of Taxation:and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's.Central. Accounting System by the Dizector of State Accounts, Office of the State Comptroiler, 110 State Street, Albany, New York 12236.
12. EOUAL KMPLOYMENT OPPORTUNITES FOR MNORITIES AND WOMEN In accordance with Section 312 of the Executive Law, if this contract is: (i) a written Agreement or purchase order instrument, providing for a total expenditure in excess of $\$ 25,000.00$, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written Agreement in excess of $\$ 100,000.00$ whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements.thereon; or (iii) a written Agreement in excess of $\$ 100,000.00$ whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation - of real propenty and improvements thereon for such project, then:
(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin; sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities - without discrimination. Affirmative action shall mean recruitment, employment; job assignment, promotion, upgrading, demotion, transfer, layoff, or termination and rate of pay or other forms of compensation;
(b) At the request of the contracting. agency, the Contractor shall request each employment agency, labor union, or authorized representative of workens with which it has a collective bargaining or other Agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis or race, creed, color, national origin, sex, age, disability or manital status and that such union or representative will affrmatively cooperate in the implementation of the Contractor's obligations herein; and
(c) The Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed; color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of " $a$ ", " $b$ " and " $c$ ", above, in every subcontract over $\$ 25,000,00$ for the construction, demolition, replacement, major repair, renovation, planning or design of real property and $*$... improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a Contractor or Subcontractor with the requirements of any Federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such Federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the NYS Department of Economic Development's Division of Minority and Women-Owned Business Development pertaining hereto.
13. CONFLXCTING TERMS. In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this subsection, the terms of this subsection shall control.
14. GOVERNING LAW. This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.
15. LATE PAYMENT. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article XI-A of the State Finance Law to the extent required by law.
16. NO ARBITRATION. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized) but must, instead, be heard in a count of competent junisdiction of the State' of New York.
17. SERVICE OR RROCESS. In addition to the methods of service allowed by the State Civil Practice Law \& Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upoin Contractor's actual neceipt of process or upon the State's receipt.of the return thereof by the United State Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of processe cari be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty ( 30 ) calendar days after service hereunder is complete in which to respiond.
18. PROBIBITION ON PURCHASE OR TROPICAL MARDWOODS. The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not. limited to, the specifications and provisions of State Finance Law Section 165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State of any govemmental agenicy or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the . responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any-portion of this contract involving the use of woods, whether supply or installation, is to be performed by any Subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the Subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in Section 165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for excmption will be the responsibility of the Contractor to meet with the approval of the State.
19. PURCEASES OF APPAREL. In accordance with State Finance Law $\$ 162$ (4-a), the State shallinot purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance
with all applicable laber and occupational safety, laws, including, but not limited to, child labor laws, wage and hours lavis and workplaco safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at: the time of signing a contract with the State), if known, the names and addresses of each Subcontractor and a list of all manufacturing plants to be utilized by the bidder.
20. CONTRACT TGRNINATLON FROVISION. The State resserves the right to terninate this contract in the. event it is found that the certification filed by the Contractor in iccordance with the requirements contained in State Finance Laws §139j and §139k was intentionally false or intentionglly incomplete Upon such finding, the State may exerciseits termination right by providing written notification to the Contractor in accordance with the written notification terme of the contract.

NYCDOT AMP 15 TA
Rev. (1/14)

## DESIGNATION OF AFFIRMATIVE ACTION REPRESENTATIVES BY CONTRACTORS/SUBCONTRACTORS

In accordance with Equal Employment Opportunity (EEO) and Disadvantaged Business Enterprise (DBE) Utilization participation requirements of the New York City Department of Transportation contract identified below, the following information shall be furnished by the contractor and all subcontractors prior to approval to work.

1. Contract No.
2. Contractor: $\square$ Name

Address
City/State/Zip
2. County
or Subcontractor: $\square$
4. Equal Employment Opportunity Officer:

Name $\qquad$
Title $\qquad$
Address $\qquad$
City/State/Zip
Telephone $\square$
( )
5. Contract Site Equal Employment Opportunity Representative:

Name $\qquad$
Title $\qquad$
Address $\qquad$
City/State/Zip


Telephone $\square$
)
6. Disadvantaged/ Minority/Women's Business Enterprise (D/M/WBE) Officer:

Name
Title
$\qquad$

Address
$\qquad$

City/State/Zip
Telephone

7. Designation Submission: $\square$ Initial $\square$ Revised

This form shall accompany DBE pre-award submittal AAPHC 89 to the Contract Compliance Unit.
(NO TEXT ON THIS PAGE)

|  | Firm Name Contact | Program | Telephone No. <br> E-Mail Address | NYSDOT <br> Work <br> Code(s) | Date of Contact | Method(s) of Contact | DBE <br> Response <br> Code(s) | Bidder Action Code(s) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | Select One | 11 |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 2 |  | Select One | $11-$ |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 3 |  | Select One | ( ) - |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 4 |  | Select One | $11-$ |  | 11 | Select One |  |  |
|  |  |  |  |  | / / | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 5 |  | Select One | 1 |  | 11 | Select One |  |  |
|  |  |  | . |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 6 |  | Select One | 11 |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 7 |  | Select One | 11 |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 8 |  | Select One | 11 - |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  | , |
| 9 |  | Select One | 11 |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 10 |  | Select One | $1)$ |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |

Letting Date 1
Contractor Name \& Address

## Contract No.

|  | Firm Name Contact | Program | Telephone No. <br> E-Mail Address | $\begin{aligned} & \text { NYSDOT } \\ & \text { Work } \\ & \text { Code(s) } \end{aligned}$ | Date of Contact | Method(s) of Contact |  | Bidder Action Code(s) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | Select One | 11 |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 2 |  | Select One | 11 |  | 11 | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 3 |  | Select One | ( ) - |  | 11 | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 4 |  | Select One | ( ) |  | 11 | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
| 5 |  | Select One | ( ) |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | / / | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 6 |  | Select One | $1)$ |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | / / | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 7 |  | Select One | 11 |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 8 |  | Select One | 11 |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 9 |  | Select One | (1) |  | 11 | Select One |  |  |
|  |  |  |  |  | $1 /$ | Select One |  |  |
| 10 |  |  |  |  | 11 | Select One |  |  |
|  |  | Select One | ( ) |  | $1 /$ | Select One |  |  |
|  |  |  |  |  | 11 | Select One |  |  |
|  |  |  |  |  | / / | Select One |  |  |

[^10](NO TEXT ON THIS PAGE)

## NEW YORK CITY <br> DEPARTMENT OF TRANSPORTATION DISADVANTAGED BUSINESS ENTERPRISE SCHEDULE OF UTILIZATION

| INSTRUCTIONS |
| :--- |
| 1. The low bidder must complete all appropriate sections of this form as a prerequisite to contract award or to any amendment |
| to approved DBE Utilization. |
| 2.For initial contract award, this form must be accompanied by a completed form AAPHC89 (DBE Utilization Worksheet) for <br> each DBE that will be utilized in the contract. <br> 3. <br> For amendment to an approved award this form must be accompanied by a completed form AAP 89 for any DBE that is to be <br> added to the original utitization plan; and/or by a completed form AAP $89-1$ (DBE Utilization Worksheet Amendment) for any <br> DBE whose approved utilization is to be changed. <br> 4. <br> Describe DBE Utilization as one of the following: <br> SC - Subcontract Construction TS - Trucking or Services MS - Materials or Supplies <br> 5. ( $60 \%$ credit applied for MS) <br> The dollar value of utilization for each DBE is the actual amount to be paid to the DBE, not the contract item bid price. |

CONTRACT INFORMATION


| Date |
| :---: |

## TO BE COMPLETED BY CCU

The Bidder $\quad$ has has not demonstrated good faith efforts to secure DBE utilization in satisfaction of the contract goals as required by the contract specifications.

Date: $\qquad$ Signature: $\qquad$

## NEW YORK CITY DEPARTMENT OF TRANSPORTATION DBE UTILIZATION WORKSHEET



This approval may be rescinded at any time in the progress of the work if work of the Subcontractor is determined unsatisfactory.
No Work may be assigned by the Subcontractor to a second tier Subcontractor. No work may be performed by a Subcontractor other than that specifically approved by the Contract Compliance Director. The signators below agree that violations of the foregoing may result in no payment by the City for the related work.
No work shall be started by the Subcontractor prior to filing the required insurances. The contractor and Subcontractor hereby certify that the subcontract is in writing, and contains all the pertinent provisions of the prime contract in regard to Federal, State, and City Laws and Regulations.

| Contractor's Signature |  |  | Date | Subcontractor's Signature |  | Date |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | < | BID | MMOUNT | AGREED |  |
|  | ITEM No. |  | $\begin{gathered} 100 \\ \% \end{gathered}$ | \$ SPECIALTY | \$ NON-SPECIALTY | AMOUNT \$ | CNT |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
|  |  |  | LS: |  | \$ |  |  |

The Subcontractor named above is approved for utilization under the DBE General Provisions. Approval of this worksheet conveys only the Department's concurrence in the use of the named subcontractor for the items specified, and application of the DBE Agreed Amount to the participation goals of the contract. CCU approval of an Approval to Subcontract form AAPHC 89 is required prior to subletting or otherwise assigning any part of the contract.

## APPROVED FOR OFFICE OF EQUAL OPPORTUNITY DEVELOPMENT AND COMPLIANCE BY:

DATE APPROVED
$1 \quad 1$

# NEW YORK CITY <br> DEPARTMENT OF TRANSPORTATION <br> <br> DBE UTILIZATION WORKSHEET 

 <br> <br> DBE UTILIZATION WORKSHEET}

New York City Department of Transportation DBE General Provisions requires that prior to contract award, Contractors must obtain written consent of the NYCDOT to a utilization plan that identifies certified disadvantaged owned business enterprises that have committed to perform work on a proposed contract. Authority for approval of utilization has been delegated to the Contract Compliance Unit (CCU). The DBE Utilization Worksheet is used to describe in item detail the utilization plan for each proposed subcontractor.

DBE Provisions require Prime Contractors to obtain written consent of the Department prior to subletting or otherwise assigning any part of the contract. Authority for approval to subcontract has been delegated to the Contract Compliance Unit.

The DBE Utilization Worksheet has been designated for use as form AAPHC 89. When submitting forms for firms included in the Contractor's Utilization Plan, prepare a signed copy as described below. All DBE Utilization Worksheets are to be submitted directly to CCU as attachments to a revised Utilization Plan, form AAP 19.

CONTRACT No.: Enter New York City contract number. (Example: BRC100)
COUNTY: Enter name of county or counties of this project. (Example: Bronx)
F.A. Project No.: Enter only for Federal Aid Projects. (Example: I-87-3(177)

PAGE No.: Enter 1 of 1,1 of 2, or 2 of 2 etc. Use additional forms as needed.
DATE SUBMITTED: Enter date completed forms are submitted to OCC (MM/DD/YY)
CONTRACTOR AND SUBCONTRACTOR DATA: Enter names, and addresses (including ZIP code), telephone numbers (including area codes) and Federal Identification Numbers for both the Contractor and Subcontractor.

EST. BEGINNING DATE: Enter estimated month and year in which subcontractor work will begin.
EST. COMPLETION DATE: Enter estimated month and year in which subcontractor work will completed.
SIGNATURES: Authorized representatives of both the prime and subcontractor sign and date.
ITEM No. AND NAME: Enter each item or specification number and name. If only part of an item is to be subcontracted check the "less than $100 \%$ " box and attach a description of the specific work to be performed.

BID AMOUNT: Enter the prime contractor total bid price for items of work being subcontracted, item by item, under appropriate heading of "Specialty" or Non-Specialty" and enter totals for each "Specialty" items, if any, are designated in the contract proposal. If only part of an item is to be subcontracted enter the amount of the prime contractor bid amount that represents the portion of the item that is being subcontracted: For other than subcontract work, i.e. material supplier and off-site trucking or other services no entry is required under "Specialty" or "Non-Specialty" headings.

DBE ONLY AGREED AMOUNT: In addition to completing the appropriate bid amount columns as described above on the utilization worksheet enter the agreed amount for each item of work to be performed by a certified DBE. Indicate if the contractor's Utilization Plan whether subcontractor, material supplier, trucker or provider of other services

TOTALS: Enter the sum of all Bid Amounts and DBE Agreed Amounts, if any.

[^11]
## NEW YORK CITY DEPARTMENT OF TRANSPORTATION DBE UTILIZATION WORKSHEET AMENDMENT

| CONTRACT No. | COUNTY | F. A. PROJECT No. |  | PAGE No. OF $\qquad$ |  | DATE SUBMITTED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONTRACTOR |  |  | SUBCONTRACTOR |  |  |  |
| NAME ADDRESS |  |  | NAME ADDRESS |  |  |  |
|  |  |  |  |  |  |  |
| PHONE |  |  | PHONE |  |  |  |
| FED. ID No. |  |  | FED. ID No. |  |  |  |
| The Contractor shall inform the Engineer in Charge the dates when the Subcontractor starts and completes all work under the subcontract. When work performed by the Subcontractor is included in an estimate for payment, labor affidavits, copies of payrolls, etc. are to be submitted in the same manner and number as required of the Prime Contractor. |  |  | EST. BEGI <br> (Mo \& Yr) | g DATE $\qquad$ |  | COMPLETION DATE <br> Yr) $\qquad$ / $\qquad$ | This approval may be rescinded at any time in the progress of the work if work of the Subcontractor is determined unsatisfactory. No work may be assigned by the Subcontractor to a second tier Subcontractor. No work may be performed by a Subcontractor other than that specifically approved by the Contract Compliance Director. The signatories below agree that violations of the foregoing may result in no payment by the City for the related work.

No work shall be started by the Subcontractor prior to filing the required insurances. The contractor and Subcontractor hereby certify that the subcontract is in writing, and contains all the pertinent provisions of the prime contract in regard to Federal, State, and City Laws and Regulations.

| Contractor' Signature |  | Date |  | Subcontractor's Signature |  |  | ate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ONLY LIST ITEMS TO BE ADDED, DELETED, INCREASED OR DECREASED: See Instructions. |  |  |  |  |  |  |  |
| ITEM No. | NAME | Previous Entry | $\underset{100 \%}{<}$ | BID A | UNT <br> \$ NONSPECIALTY | AGREED AMOUNT \$ | $\left\lvert\, \begin{aligned} & \text { \% to } \\ & \text { CNT } \end{aligned}\right.$ |
| 1 |  | PREV |  |  |  |  |  |
|  |  | NEW |  |  |  |  |  |
| 2 |  | PREV |  |  |  |  |  |
|  |  | NEW |  |  |  |  |  |
| 3 |  | PREV |  |  |  |  |  |
|  |  | NEW |  |  |  |  |  |
| 4 |  | PREV |  |  |  |  |  |
|  |  | NEW |  |  |  |  |  |
| 5 |  | PREV |  |  |  |  |  |
|  |  | NEW |  |  |  |  |  |
| Total all PREV Bid Amounts \& D/M/WBE Agreed Amounts: |  |  |  |  |  |  |  |
| Total all NEW Bid Amounts \& D/M/WBE Agreed Amounts: |  |  |  |  |  |  |  |
| NET TOTAL AMENDMENTS: |  |  |  |  |  |  |  |
| The Subcontractor named above is approved for utilization under the DBE General Provisions. Approval of this worksheet conveys only the Department's concurrence in the use of the named subcontractor for the items specified, and application of the DBE Agreed Amount to the participation goals of the contract. CCU approval of an Approval to Subcontract (Amended) form AAPHC 89-1 is required prior to subletting or otherwise assigning any new work shown on this worksheet. |  |  |  |  |  |  |  |
| APPROVED FOR OFFICE OF EQUAL OPPORTUNITY DEVELOPMENT AND COMPLIANCE BY: |  |  |  |  |  | DATE APPROVED |  |

NYCDOT AAP 89-1 FTA (1/14)

## REVERSE

## INSTRUCTIONS FOR COMPLETING FORM AAPHC 89-1 DBE UTILIZATION WORKSHEET AMENDMENT

New York City Department of Transportation DBE Provisions requires that prior to contract award; Prime Contractors must obtain written consent of the Department to a utilization plan that identities certified disadvantaged owned business enterprises that have committed to perform work on a proposed contract. Authority for approval of utilization has been delegated to the Contract Compliance Unit (CCU). The DBE Utilization Worksheet is used to describe in item detail the utilization plan for each proposed subcontractor. The DBE Utilization Worksheet Amendment is used to describe in item detail any change (addition, subtraction, increase and/or decrease) to a previously approved worksheet.

DBE Provisions require Prime Contractors to obtain written consent of the Department prior to subletting or otherwise assigning any part of the contract. Authority for approval to subcontract has been delegated to the Contract Compliance Unit.
The DBE Utilization Worksheet Amendment has been designed for use as form AAPHC 89-1, when submitting forms for firms included in the Contractor's Utilization Plan, prepare a signed copy as described below. All DBE Utilization Worksheet Amendments are to be submitted directly to OCC as attachments to a revised Utilization Plan, form AAP 19.

Approval of the Utilization Worksheet Amendment conveys only the Department's concurrence in the use of the named subcontractor for the items specified, and application of the DBE Agreed Amount to the participation goals of the contract.

Only one DBE Utilization Worksheet is to be submitted for each subcontractor on this prime contract. DO NOT submit amendments to the item(s) or amount(s) of work proposed for a subcontractor on another form AAPHC 89. After initial forms have been filed for a given subcontractor, any amendments to the item(s) or amount(s) of work to be performed by this subcontractor will be submitted on form AAPHC 89-1.

Examples: (1)To add or delete items of work and/or increase or decrease the value of an item of work on a previously approved Utilization Worksheet: complete form AAPHC 89-1.
(2) To transfer part of a previously approved Utilization Worksheet from one subcontractor to another previously approved subcontractor: complete two sets of forms AAPHC 89-1. On the first request approval to decrease previously approved value(s) and on the second request approval to increase previously approved value(s).
(3) To transfer part of a previously approved Utilization Worksheet from one subcontractor to a new, not previously approved subcontractor: complete form AAPHC 89-1 and one form AAPHC 89. On the form AAPHC 89-1, request approval to decrease the value of a previously approved subcontract; on the form AAPHC 89, request approval to execute an entirely new subcontract with a new subcontractor.

AN AMENDMENT THAT REDUCES THE UTILIZATION OF AN APPROVED DBE MUST BE ACCOMPANIED BY SUPPORTING DOCUMENTATION (i.e.. a letter of unavailability from the DBE).

CONTRACT NO.: Enter NYC contract number. Example: BRC100
COUNTY: Enter name of county or counties. Example: Manhattan \& Brooklyn
F.A. PROJECT No.: Enter only for Federal-Aid projects. Example: I-87-3(177)


## NYCDOT AAP 21LL (FTA) Form Instructions:

Final Report: Check YES or NO, as appropriate, to indicate whether this will be the Final Report submitted for this vendor.

## Contract No: Enter NYC DOT PIN (Project Identification Number) and Local Project contract number.

County: Enter the name of the county or counties this project is located in.
Report Date: Enter date (Month/Day/Year) through which payments due and made are reflective of.
Contractor and Vendor Data: Enter names, and addresses (including zip code), Telephone numbers (including area codes) and Federal Identification Numbers for both the Contractor and Vendor.

Total Payments Due to Date: Enter total of payments due to the vendor to date.
Withholding to Date: Enter amount due vendor that has not been paid. Any withholding must be explained in the Comments section.

Total Payment to Date: Value of payments due to date less withholding.
Comments: Amounts recorded as withholding must be accompanied by a brief description of the circumstances necessitating the withholding along with item numbers involved (if any). If there is not enough space, then attach a letter of explanation to this form.

Signatures: Authorized representatives of both the Prime Contractor and Subcontractor/Vendor sign and date.
Notarization: The signatures must be notarized by a duly registered Notary Public.
The AAP 21LL is a cumulative to-date report of the total payments due a vendor, total withholdings, and total payments made to the vendor. The AAP 21LL is to be submitted and notarized by the 15 th day of the following month to the Regional Local Project Liaison (RLPL) for each vendor due payment during the previous month or when requested by the Project Sponsor or the NYC Department of Transportation. The dollar values on this report should be accurate through the last day of the previous month. The Final AAP 21LL should be submitted as soon as possible after the vendor has completed/supplied all of the work/service/products for which it was utilized, but not later than 30 days after the vendor/subcontractor has completed its commitment.

The Prime Contractor shall submit a copy of the AAP 21LL signed by an authorized representative of their firm, to the Sponsor and to each vendor due payment on the project.

The Prime Contractor shall inform the Vendor of its responsibility to review the form for accuracy, to sign and return the form to the Sponsor, and to have the Vendor's signature on the AAP 21LL.

This report is a written instrument within the meaning of Section 175.00 of the Penal law. I am fully aware that it will be filed with the New York City Department of Transportation and become a part of the records thereof and that entering any false information hereon constitutes the crime of offering a false instrument for filing in the first degree, which is a Class E Felony. (Penal Law, Section 175.35)

## PRE-AWARD D/M/WBE MATERIAL SUPPLIER COMMITMENT INFORMATION

## A Low Bidder that submits a D/MNBE Utilization Pre-Award Package that includes amount(s) for Material Supply must complete this form to show how the commitment amount was determined.

## Contract D

$\qquad$
$\qquad$

Material Supplier: $\qquad$

## Address:

## Material Work Code / Type of Material: <br> $\qquad$ 1

Associated Contract Pay Item (3 digit core as a minimum): $\qquad$

Commitment Amount:

Are these Item(s) $\quad$ Stockpiled or $\square$ Special Ordered?
If Special Order, does the Manufacturer also sell these items on a retail basis? Yes $\square$ No
Will the Materials be delivered to the Contract site?
$\square$ Yes $\Gamma$ No
If Yes, who will deliver the Materials?
$\square$ Material Supplier
$\square$ Manufacturer
■ Delivery / Mail Service

Who will pay for Materials / Supplies? $\quad$ Contractor $\square$ $\qquad$
Who negotiated the cost of the Supplies? Contractor $\square$ $\qquad$
Notes / Comments:
$\qquad$ of $\qquad$

## PRE-AWARD DBE TRUCKING COMMITMENT INFORMATION

| Contract No. | PIN |
| :---: | :---: |
|  |  |


| Project Sponsor | County |
| :---: | :---: |
|  |  |

## Supervisor of the day-to-day DBE trucking operation is:



| DBE Trucking Firm:_, Total |  |  |  |
| :--- | :---: | :---: | :---: |
| No. of Trucks | Owned | Leased | Toler |


| Number of Trucks Performing <br> Work | Rate (\$) | Per | Duration/No. | Commitment (\$) |
| :--- | ---: | ---: | ---: | ---: |
| On-Site |  |  |  | $\$ 0.00$ |
| Off-Site |  |  |  |  |
| TOTAL |  |  |  | $\$ 0.00$ |


| DBE Trucking Firm: |  |  |  |
| :--- | :---: | :---: | :---: |
| No. of Trucks | Owned | Leased | Total |


| Number of Trucks Performing <br> Work | Rate (\$) | Per | Duration/No. | Commitment ( $\$$ ) |
| :--- | ---: | ---: | ---: | ---: |
| On-Site |  |  |  | $\$ 0.00$ |
| Off-Site |  |  |  | $\$ 0.00$ |
| TOTAL |  |  | $\$ 0.00$ |  |


| DBE Trucking Firm: |  |  |  |
| :--- | :--- | :--- | :---: |
| No. of Trucks | Owned | Leased | Total |
|  |  |  | 0 |


| Number of Trucks Performing <br> Work | Rate (\$) | Per | DurationiNo. | Commitment (\$) |
| :--- | ---: | ---: | ---: | ---: |
| On-Site. |  |  |  | $\$ 0.00$ |
| Off-Site |  |  |  | $\$ 0.00$ |
| TOTAL |  |  | $\$ 0.00$ |  |

[^12]
## New York City Department of Transportation SUBCONTRACTOR/ CONSULTANT PROFILE FORM

| $\square$ Initial $\square$ Revised $\quad \square$ Final | DOT Project Manager: |
| :---: | :---: |
| CONTRACT INFO | PRIME INFO |
| Type: $\square$ Construction $\square$ Professional Services $\square$ Standard Services | Name: |
| Funding: $\square$ fHWA $\square$ fTA $\square$ state $\square \mathrm{CITY}$ | Address: |
| Unit/ Division:__ $\square$ |  |
| Contract No.: | Phone: |
| Contract Reg. No.: | Fax: |
| Procurement Id No. (PIN): | EIN: |
| Contract Value: | E-Mail: |
| Over All Minority Goal: $\qquad$ \% MWBE $\qquad$ \% DBE | \% MBE (NYS) ___ \% WBE (NYS) |
| $\square$ SUBCONTRACTOR INFO |  |
| $\square$ Subcontractor $\square$ Subconsultant $\quad \square$ Material Supplier $\quad \square$ Truct <br> $\square$ Yes $\square$ No Has a Registered Apprenticeship Progra <br> $\square$ Yes $\square$ No Has Required Licenses. If Yes, Please | king Services $\quad \square$ Fabricator $\quad \square$ Standard Services m . If Yes, Please attached supporting documentation. tached supporting documentation. |

Subcontract Value: $\qquad$
Name:



## INSTRUCTIONS

- Prime Contractor must complete this form.
- A Subcontractor Profile Form must be completed for EACH Subcontractor that will perform work or supply material on the contract. Make additional copies of this form as needed.
- Please indicate if the form is the Initial, Revised or Final submission.
- Please indicate the name of the DOT Project Manager for this contract.


## Contract Info:

Type: Indicate Industry type as one of the following: Construction, Professional Services or Standard Services.
Funding: Indicate contract funding: FHWA, FTA, State, or City (MWBE and Non-MWBE).
Unit/ Division: Specify unit or division letting this contract. i.e. Bridges/Traffic/ Ferries, etc.
Contract No.: Enter New York City Contract No. as appropriate.(Example: BRC100)
Contract Registration No.: If known, enter the Registration No. assigned to this contract.
Procurement Id No. (PIN): Enter New York City PIN No. as appropriate. (Example: 84109MBSA000)
Contract Value: Enter the Total Agreed Amount of the Proposed Contract Agreement between the Prime Contractor and the Agency for this project.
Over All Minority Goal: Enter minority percentage goal required for this contract.
MWBE I DBE: Enter minority requirement on this contract.
Contract Description: Enter project description.

## Prime Info:

CONTRACTOR: "Contractor" means a person, including a vendor, who is a party or a proposed party to a contract with a contracting agency, first-level subcontractors of supply and service contractors, and all levels of subcontractors of construction.
Name: Enter the legal name of the Prime's firm.
Address: Enter current business address.
Phone: Enter current business phone number or a number where business representatives can be located.
Fax: Enter business fax number.
EIN: Enter legal Employer Identification Number (EIN).
E-mail: Enter e-mail address, if any.

## Subcontractor Info:

Describe utilization as one of the following: Subcontractor, Sub consultant, Material Supplier, Trucking Services, Fabricator or Standard Services.
Registered Apprenticeship Program: Prime Contractor must indicate if Subcontractor has a Registered Apprenticeship Program. A Subcontractor in the
Construction field with a contract exceeding 1M must have a Registered Apprenticeship Program in place. Subcontractors must get a letter from the Union indicating
that they are signatory contractors to their unions for the trades that they intend to use on this project and that they have a Registered Apprenticeship Program with
NYSDOL.
Licenses: Prime Contractor must indicate wheather or not a License is required for work of Subcontractor. If so, document that the Subcontractor has all required Licenses. Please attached License Certificate.
Subcontract Value: Enter the Total Agreed Amount of the Proposed Contract Agreement between the Prime Contractor and the Subcontractor for this project.
Start Date: Enter estimated date on which subcontractor work will begin.
End Date: Enter estimated date on which subcontractor work will be completed.
Name: Enter the legal name of the Subcontractor's firm.
Address: Enter current business address.
Phone: Enter current business phone number or a number where business representatives can be located.
Fax: Enter business fax number.
EIN: Enter legal Employer Identification Number (EIN) number.
E-mail: enter e-mail address, if any.
Certified As: Indicate what type of Minority Certification and Ethnic Group Designation the Subcontractor has, if any.
Check Appropriate Box: Ethnicity requirements apply only to minority subcontractors, subconsultants, material suppliers and trucking firms for reporting purposes to the NYC Small Business Sevices, Mayors Office of Contract Services and the Federal-Aid Construction Programs Contract Compliance Monitoring and Reporting.
Subcontract Description: Describe work to be pefform by Subcontractor/ Subconsultant.
i.e. (Fencing, Painting, Construction or Construction Management Services, Trucking, Towing Services, Tree Pruning/Planting)

## Prime Contractor Certification:

Enter Name, Title, Signature, and Date of completion of this form by the Company Official.
Submit Completed Form To:

| CITY OF NEW YORK <br> INITLAL, MST' OF SUBCONIRACTORS ("INITIAL LOS") Page 1 of _- |  |  |
| :---: | :---: | :---: |
| Directions: For all contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form to indicate a list of persons to which it intends to award subcontracts to within the first 12 months following receipt of the Notice to Proceed ("NTP"). The contractor is required to submit this form within 30 days of the contracting agency's issuance of the NTP. Each page should be signed and certified. Attach additional pages (copies of this page), as needed. |  |  |
| PRIME CONTRACTINFORMATION |  |  |
| Agency: | Unit/Division: |  |
| FMS Contract No.: | PIN: |  |
| Contract Value: \$ | Registration Date: |  |
| Contract Description: |  |  |
| PRIME CONTRACTOR IDF VTIFICATION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City | State/Zip: |
| EIN/SSN: | E-Mail: |  |
| SUBCONTRACTOR \#1 INIORMATIOA |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City | Stat/Zip: |
| ELN/SSN: | E-Mail: |  |
| Subcontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: | Approx. End Date: |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ DBE $\square$ (check all that apply and note status) N/A |  |  |
| SLBCOMTRACTOR Fin INIORMATION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City | State/Zip: |
| EIN/SSN: | E-Mail: |  |
| Subcontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: | Approx. End Date: |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ DBE $\square$ (check all that apply and note status) N/A |  |  |
| SLBCONTRA(TOR STSTORMATIOX |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City: | State/ZIP: |
| EIN/SSN: | E-Mail |  |
| Subcontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: | Approx. End Date: |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ DBE $\square$ (check all that apply and note status) N/A |  |  |
| Prime Contractor ferfilication: I herely affimitat fle information supplied is truc and conted. |  |  |
| Signature: | Title: |  |
| Print Name: | Date: |  |


| CITY OF NEW YORK <br> INITIAL LIST OF SUBCONTRACTORS ("INITIAL INS") Page 2 of |  |  |
| :---: | :---: | :---: |
| Directions: For all contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form to indicate a list of persons to which it intends to award subcontracts to within the first 12 months following receipt of the Notice to Proceed ("NTP"). The contractor is required to submit this form within 30 days of the contracting agency's issuance of the NTP. Each page should be signed and certified. |  |  |
| PRIME CONTRACT INFORMATION |  |  |
| Agency: | Unit/Division: |  |
| FMS Contract No.: | PIN: |  |
| Contract Value: \$ | Registration Date: |  |
| Contract Description: |  |  |
| PRIM | OR IDIENTIFICATI |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City | State/Zip: |
| EIN/SSN: | E-Mail: |  |
| SUBCONTRACTOR + INFORMATION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City | State/Zip: |
| EIN/SSN: | E-Mail: |  |
| Subcontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: ${ }^{\text {a }}$ Approx. End Date: |  |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ DBE $\square$ (check all that apply and note status) N/A$\square$ |  |  |
| SLBCONTRACTOR 5 INPORMATION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City | State/Zip: |
| EDN/SSN: | E-Mail: |  |
| Subcontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: $\quad$ Approx. End Date: |  |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ DBE $\square$ (check all that apply and note status) N/A |  |  |
| SUBCOATRACTOR:GINFORMATION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | City: | State/ZIP: |
| EIN/SSN: | E-Mail |  |
| Subcontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: $\quad$ Approx. End Date: |  |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ DBE $\square$ (check all that apply and note status) N/A Prime Contractor Cerfification: I hereby affim that the information suppled is fre and cortec. |  |  |
|  |  |  |
| Signature: | Title: |  |
| Print Name: | Date: |  |

> New York City Department of Transportation SUBCONTRACTOR / SUBCONSULTANT MONTHLY PAYMENT REPORT

CONTRACT No./ PIN No.: $\qquad$
REGISTRATION No.: $\qquad$
PRIME CONTRACTOR: $\qquad$
Page No.: $\qquad$ of $\qquad$
MONTH: $\qquad$
Work Completed
To Date: $\qquad$ \%

| SUBCONTRACTOR'S NAME / SUBCONSULTANT'S NAME | Certification (DB13. M1Bl.: WBz. 1.131. None) | Contract Value | Total Payments This Month | Total Payments To Date |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | TOTAL: |  |  |  |

REMARKS:

## FALSIFICATION OF THIS STATEMENT IS A PUNISHABLE OFFENSE

I certify that the total payments above reflect the value of the work done by the subcontractors/subconsultants that payments have been made by the Contractor and received by the Subcontractor/Subconsultant as specified above; that there were no Rebates, Refunds or Offsets applied to any payments unless the same is noted above; and that it is known to me to be true of my knowledge.

PRIME CONTRACTOR'S / CONSULTANT'S NAME

PRINT NAME

##  SUBCONTRACTOR / SUBCONSULTANT PAYMENT REPORTS

New York City Department of Transportation requires Prime Contractors / Consultants to report payments made to ALL SUBCONTRACTORS / SUBCONSULTANT that are utilized on city contracts. Prime Contractor/ Consultant report of payments to ALL SUBCONTRACTORS / SUBCONSULTANTS is required on a monthly basis or when requested by the Department. Failure by the Prime Contractor / Consultant to submit this report to the
Department's Project Engineer-In-Charge or directly to Contract Compliance Office as directed and in accordance with the above may result in the withholding of payments.
Prepare one report per contract and list ALL subcontractors / subconsulants employed on this project regardless of payments.
PAGE No.: Enter 1 of $1 ; 1$ of $2 ; 2$ of 2 ; etc. Use additional forms as needed.
CONTRACT No.: Enter New York City Contract No. or PIN No. as appropriate.
(Example: BRC100 or 84109MBSA000)
REGISTRATION No.: Enter the Registration No. assigned to this contract. This may be obtained from the "Notice of Award" and/ or the "Order to Commence Work" letters.

MONTH: Enter month to which payment amounts refer.
PRIME CONTRACTOR / CONSULTANT: Enter the legal name of the Prime's firm.
WORK COMPLETED TO DATE: Enter the percentage of work completed to date in relation to the life of the contract.
SUBCONTRACTOR: Enter names of ALL Subcontractors employed by your firm that utilized on this project.
SUBCONSULTANT: Enter names of ALL Sub consultants employed by your firm that utilized on this project.
CERTIFICATION: Indicate what type of minority certification the Subcontractor/ Subconsultant has if any. Otherwise indicate "None". Do not leave it blank.
CONTRACT VALUE: For each Subcontractor / Subconsultant enter the Total Agreed Amount of the Proposed Contract Agreement between the Prime Contractor and the Subcontractor for this project.

TOTAL PAYMENTS THIS MONTH: Enter total Payments made to Subcontractor / Subconsultant for the indicated month.
TOTAL PAYMENTS TO DATE: Total Value of Actual Payments to Date, amount shown will be Total Payments Due less Retainage or Other Withholding, if any.
REMARKS: Prime Contractor / Consultant must indicate any monies under dispute or the subject of exceptions or withholdings; and a brief description of the circumstances leading to the dispute or exception.

SIGNATURE: Authorized representative of the Prime Contractor / Consultant must sign and date form.


## AGENCY CHIEF CONTRACTING OFFICE CIVIL RIGHTS COMPLAINT FORM

Today's Date: 2/28/2012

COMPLANANT

| Name | Telephone\# - Home $\square$ Office $\square$ Mobtle $\square$ |  |  |
| :---: | :---: | :---: | :---: |
| Address | Email |  |  |
| Clty/State/Zip | Complaint received through Telephone Email | letter | $\square$ In-Person |



DESERMONOF COMPLANT

## NATURE OF COMPLAINT (check all that apply)

$\square$ Harassment
$\square$ IntimidationThreatsCoercion
Other
$\qquad$

If you have checked any of the above, please indicate the basis of the civil rights violation below.
$\square$ Race $\square$ GenderDisability
$\square$ AgeEthnicitySexual OrientationRetaliation for Filing a ComplaintNational OriginReligionTitle VI - Refer to Title VI OfficerOther: $\qquad$ (explain)

| Name | THTAKE |
| :--- | :---: |
| Signature | Tite |

## RESOLUTION

بम, $\quad$,
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


| CTY OF NEW YORK <br> ANAIALIST OF SHBCONTRACTORS "ANNLAL IOS"; |  |  |
| :---: | :---: | :---: |
| Difrections: For all multi-year contracts for which a utilization plan has been submitted pursuant to Local Law 129 of 2005, the contractor must use this form annually to indicate a list of persons to which it intends to award subcontracts to during each twelve month period following the filthil year of the contract term. Each page should be signed and certizied. Attach additional pages (copies of this page), as needed. |  |  |
| PRJMECONTRACTINORMAIION |  |  |
| Aqenoy: | OnitDivision: |  |
| EMS Contract No.: | PIN: |  |
| Contract Value: ${ }^{\text {S }}$ | Registration Date: |  |
| Contract Deseription: |  |  |
| PRIME CONTRACTOR IDFNTIFICAION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | Cify | StatelZip: |
| EIN/SSN: | E-Mail: |  |
| SUBC ONTRACTOR Hi INFORMATION |  |  |
| Nante; |  |  |
| Phone: | Fax: |  |
| Address: | Ctity | State/Zip: |
| ENUSSN: | E-Mail: |  |
| Subcontract Desetiption: |  |  |
| Approximate Subsontract Values \$ | Approx. Start Date: 1 Approx. Bid Date: |  |
| Contractor is DSBS-certified as: M/WBE $\square$ EBE $\square$ LBE $\square$ (checkeall that apply and mote status) N/A $\square$ |  |  |
| SUBCONTRACIOR H2 INTOAMATION |  |  |
| Name: |  |  |
| Phone: | Fax: |  |
| Address: | Clty | StatelZy: |
| EINTSSM: | E-Mait |  |
| Subsontract Desicription: |  |  |
| Approximate Subconitact Value: $\$$ | Approx. Start Date: $\quad$ Approx. End Date: |  |
| Contractor is DSBS-certified as; M/WBEDEBE $\square$ LBE $\square$ (check all that apply anin note status) N/A $\square$ |  |  |
|  |  |  |
| Name: |  |  |
| Phome: | Fax: |  |
| Addtress; | City: | State/ZIP; |
| ERN/SSN; | E-Mail |  |
| Subrontract Description: |  |  |
| Approximate Subcontract Value: \$ | Approx. Start Date: | Approx. End Date: |
| Contractor is DSBS-certified as; MWMED $\square$ EBE $\square$ LBE $\square$ (check all that apply and note status) N7A $\square$ |  |  |
|  |  |  |
| Signature: | Title: |  |
| Print Name: | Date: |  |

## CIT OF NEW YORK ANAUAL LIST OK SURCONTRACTORS ("ANNUAI, IG)"') Page 2 of

Directionst For all multi-gear contracts for which a utilization plan has been submitted pursuant to Locil Law 129 of 2005 , the contractor must use this form anmually to indicate a list of persons to which in intends to award subcontracts to duying each twelve monfh period following the intial year of the contract term. Each page should be signed and certined. Attach addifional pages (copies of this page), as needed:


## SW - PAGES SEWER AND WATER MAIN <br> REVISIONS TO SPECIFICATIONS

## NOTICE

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised January 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) and the Standard Highway Specifications (Volumes I and II) of the Department of Transportation (dated August 1, 2015) of The City of New York, shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:
A. NOTICE TO BIDDERS
B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS
C. AMENDMENTS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
D. AMENDMENTS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK
(NO TEXT ON THIS PAGE)

## A. NOTICE TO BIDDERS

(1) (A) The Contractor is advised that copies of the Standard Sewer And Water Main Specifications (dated July 1, 2014), Sewer Design Standards (dated (September 2007) Revised January 2009), Specifications For Trunk Main Work (dated July 2014) and Water Main Standard Drawings (latest revisions) are available to all prospective bidders at no cost upon presentation of receipt of purchase of Bid Package at the following location:

Department of Design and Construction Division of Infrastructure<br>Design Services, Specifications, $3^{\text {rd }}$ Floor 30-30 Thomson Avenue<br>Long Island City, NY 11101

(B) The Contractor is advised that copies of the Standard Highway Specifications (Volume I and II) (dated August 1, 2015), Standard Highway Details of Construction (latest revisions), Division of Street Lighting Specifications (latest revisions), Division of Street Lighting Standard Drawings (latest revisions), Standard Specifications for Traffic Signals (latest revisions), and Standard Drawings for Traffic Signals (latest revisions) are available to all prospective bidders for a fee at the following location:

Department of Transportation
55 Water Street, Ground Floor
New York City, NY 10041
(2) The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within twenty-one (21) to thirty (30) days of Contract Registration.
(3) The Contractor shall furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers shall be Type B, unless otherwise directed by the Engineer, and shall 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.
(4) 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.
(5) All existing house connections shall be maintained and supported during construction. The Contractor shall 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.
(6) 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 shall be replaced in kind and as directed by the Engineer. The cost of such work shall be deemed included in the prices bid for all items of work under this contract.
(7) The Contractor is notified that Victaulic Style 77 Coupling is no longer acceptable for use in any steel water main work. All reference to Victaulic Style 77 Coupling within the Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated July 2014), and the contract drawings, shall be replaced with Bolted Split-Sleeve Restrained Coupling.
(8) 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 shall 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.
(9) The Contractor is notified that the fuel cost per gallon used in the formula under Sub-Article $\mathbf{2 6 . 2 . 8}$ 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 $1^{\text {st }}$, April $1^{\text {st }}$, July $1^{\text {st }}$ and September $1^{\text {st }}$ ) 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.
(10)The Contractor is responsible for any damage to the existing street 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 shall be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications 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. Michael R. LeFosse of New York City Department of Transportation at (718) 786-2236.
(11)The Contractor shall exercise extreme caution and take all necessary precautions in placing sheeting and excavating to prevent any damage to the existing NYC TRANSIT'S subway structures and its appurtenances during construction work throughout the project area. The Contractor shall take full responsibility to protect the said NYC TRANSIT'S subway structures and its appurtenances and any damage caused by the Contractor's operations shall be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.
(12)The Contractor shall submit shop drawings to NYC Transit Authority 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 TA's structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design shall 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 shall be deemed included in the price bid for all items of work under this contract.
B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS
(NO TEXT)

## C. AMENDMENTS 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 l-11:
Add the following to Subsection 10.15:
(1) CONSOLIDATED EDISON COMPANY OF NEW YORK (CON EDISON)

There are CON EDISON facilities in the area of construction. The Contractor shall notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Mrs. Theresa Kong at (212) 460-4834.
(2) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor shall notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. at (718) 963-5612.
(3) VERIZON

There are VERIZON facilities in the area of construction. The Contractor shall notify VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Mr. David Reid at (718) 977-8138.
(4) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. Mark Larm at (917) 335-9181.
(2) Refer to Subsection 10.21 - Contractor To Notify City Departments, Page I-13: Add the following to Subsection 10.21:
(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. Edward Coleman, P.E., Assistant Commissioner, Engineering and Planning at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least thirty (30) days prior to the start of construction.

## (2) NEW YORK CITY FIRE DEPARTMENT

The Contractor shall notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 624-4194 or (718) 624-3752.
(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Steve Galgano, P.E. Chief of Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (718) 786-3550, at least seventy-two (72) hours prior to the start of construction.
(4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. James Cruickshank at (718) 965-7739.
(5) N.Y.C. TRANSIT AUTHORITY
(a) The Contractor shall notify Outside Projects at least seven (7) days prior to the start of construction.

The Contractor shall contact:
Mr. Mohamed Adam, P.E.
Project Engineer-Outside Projects
New York City Transit 2 Broadway, 7th Floor
New York, N.Y. 10004
Attention Ms. Alina Avadanei
Telephone No. (646) 252-3641
(b) The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements as required under the NYC TRANSIT GENERAL NOTES included in Section 10.25, paragraph (A), Section 10.25 paragraph (B), and Section 10.25 paragraph (C) of this addendum.

Arrangements shall be made through:

Ms. Sarah Wyss<br>Director Of Short Range, Bus Service Planning (SRB)<br>New York City Transit<br>2 Broadway, $17^{\text {th }}$ Floor<br>New York, N.Y. 10004<br>Telephone No. (646) 252-5517<br>sarah.wyss@nyct.com

(c) In addition, the Contractor is advised that construction operations might affect subway lines and stations; and NYCT facilities (i.e. manholes, ducts, etc.). The Contractor shall notify the Transit Authority as required and specified in Section 10.25 paragraph (A), Section 10.25 paragraph ( $B$ ), and Section 10.25 paragraph ( $C$ ) of this addendum.
(3) Refer to Subsection 10.25 - Contractor To Carry Out Agreement Between City And Railroad Company Or Property Owner(s), Page I-14:
Add the following to Subsection 10.25:
(A) NYC TRANSIT GENERAL NOTES

For NYC TRANSIT notes see the contract drawings.

## (B) NYC TRANSIT INSURANCE REQUIREMENTS

N.Y.C. TRANSIT INSURANCE: The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permittor) in accordance with the following "Insurance Requirements" and proof that the necessary insurance is in effect will be required before work can commence:
(1) The Permittee at its sole cost and expense shall carry or cause to carried and shall maintain at all times during the period of performance under this Agreement policies of insurance as herein below set forth below:
(A) Workers' Compensation Insurance - (including Employer's Liability Insurance) with limits as specified in Schedule "A", which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State. The policy shall be endorsed to include Longshoreman's and Harbor Workers' Compensation Act/Maritime Coverage Endorsement and/or Jones Act Endorsement when applicable.
(B) Commercial General Liability Insurance - (I.S.O. 2001 Form or equivalent) approved by Permittor in the Permittee's name with limits of liability as specified in Schedule "A" for each occurrence on a combined single limit basis for injuries to persons (including death) and damages to property. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy; the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectable insurance and must be exhausted before implicating any Permittor/MTA policy available.

Such policy should be written on an occurrence form; and shall include:

- Contractual coverage for liability assumed by the Permittee under this agreement;
- Personal and Advertising Injury Coverage;
- Products-Completed. Operations;
- Independent Contractors Coverage;
- "XCU" coverage (Explosion, Collapse, and Underground Hazards) where necessary;
- Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be voided, where necessary; and,
- Additional Insured Endorsement (I.S.O. Form CG 2026 07/04 version or equivalent) approved the Permittor naming:

New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA), the Staten Island Rapid Transit Operating Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).
(C) Business Automobile Liability Insurance Policy - (I.S.O. Form CA 00011001 or equivalent) approved by the Permittor is required if Permittee's vehicle enters Permittor property. The insurance must be in the name of the Permittee or its contractor entering the Permittor property with limits of liability in the amount specified in Schedule "A" for claims for bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.
(D) Railroad Protective Liability Insurance policy shall be required as specified in Schedule " $A$ ".
(E) Environmental/Pollution Exposures:

In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or sub-contractor to provide the applicable insurance covering such
exposure. The limits and type of insurance provided shall be satisfactory to the Permittor and will be confirmed to the parties prior to the start of the work.
(2) General Requirements Applicable To Insurance Policies:
(a) All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-NII or better and reasonably approved by the Permittor/MTA and shall deliver evidence of such policies.
(b) Except for Workers Compensation, all references to forms and coverages referred to above shall be the most recent used by the Insurance Services Office, Inc. (ISO") or equivalent forms approved by the Insurance Department of the State of New York, provided, however, that excess coverages may be written on forms reasonably acceptable to Permittor containing provisions other than those contained in ISO forms but otherwise conforming in substance to the requirements of this Article.
(c) The Permittee or its Contractor performing the work shall furnish evidence of all policies before any work is started to the permittor:

For NYCT Contract Inspection C/O Mr. John Malvasio<br>Director, MOW Engineering<br>130 Livingston Street, Room 8044F<br>Brooklyn, NY 11201<br>Telephone: (718) 694-1358

These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that the policy will not be canceled, materially changed, or not renewed, unless otherwise indicated herein, at least thirty (30) days prior written notice to the Permittor c/o MTA Risk and Insurance Management (MTA RIM) Department - Standards, Enforcement \& Claims Unit, 2 Broadway 21st floor, New York, NY 10004; and (iii) state or be endorsed to provide that the coverage afforded under the contractor's policies shall apply on a primary and not on an excess or contributing basis with any policies which may be available to the Permittor/MTA, and also that the contractor's policies, primary and excess, must be exhausted before implicating any Permittor/MTA policy available. (iv) In addition, contractor's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether contractor's policies are primary and must be exhausted before implicating any Permittor/MTA policy available, contractor's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permittor/MTA policy available. Except for Professional Liability, policies written on claims made basis are not acceptable. At least two (2) weeks prior to the expiration of the policies, contractor shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies. Except as otherwise indicated in the detailed coverage paragraphs below, self insured retentions and policy deductibles shall not exceed $\$ 100,000$, unless such increased deductible or retention is approved by Permittor/MTA. The Permittee shall be responsible for all claim expense and loss payments within the deductible or selfinsured retention. The insurance monetary limits required herein may be met through the combined use of the insured's primary and umbrella/excess policies.
(d) Certificates of Insurance may be supplied as evidence of policies of the above policies, except for Policy (D) Railroad Protective Liability Insurance Policy. However, if requested by the Permittor, the Permittee shall deliver to the Authority, within forty-five (45) days of be request, a copy of such policies, certified by the insurance carrier as being true and complete. The Railroad Protective Liability Insurance Policy must be provided in the form of the Original Policy. A detailed Insurance Binder may be provided, ACORD or Manuscript Form, pending
issuance of the Original Policy. The Original Policy must be submitted to MTA RIM within thirty (30) days of the Binder Approval.
(e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permittor Certificate of Insurance Form or MTA Certificate of Insurance Form for Joint Agency Agreements; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; \{3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the coverage; (4) indicate the Additional Insureds and Named Insureds as required herein, along with a physical copy of the Additional Insured Endorsement (I.S.O. Form CG $202607 / 04$ version or equivalent), as applicable and the endorsement(s) must include policy number(s); (5) reference the Contract by number on the face of the certificate; and (6) expressly reference the inclusion of all required endorsements.
(f) The minimum amounts of insurance required in the detail description of policies (A), (B), (C), and (D) above shall not be construed to limit the extent of the Permittee's liability under this Agreement.
(g) If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permittor, the Permittor shall have the options to: (i) direct the Permittee to suspend work or operation with no additional cost or extension of time due on account thereof; or (ii) treat such failure as an Event of Default.

## (C) NYC TRANSIT CURRENT AND FUTURE PROJECTS

For NYC TRANSIT CURRENT AND FUTURE PROJECTS see the contract drawings.
(4) Refer to Subsection 10.30 - Contractor To Provide For Traffic, Page I-15: Add the following to Subsection 10.30:
(1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. HWR100PAD.
(5) Refer to Subsection 71.41.4-Specific Pavement Restoration Provisions, Page VII-67: Add the following to Subsection 71.41.4:
(E) Specific Pavement Restoration Provisions:
(1) Within the limits of the highway reconstruction the restoration shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. HWR100PAD.
(2) In street areas requiring water main work outside the limits of highway reconstruction (in Hylan Boulevard between station 33+21 and station 34+26 as shown on sheet 33 of 85 (Utility Plan Location \# 5) and Hylan Boulevard between station 10+68 and station 12+08 as shown on sheet 49 of 85 (Utility Plan Location \# 9), the restoration shall be as follows:
(a) The permanent restoration over the trench width and cutbacks only shall consist of a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a minimum of one and onehalf ( $1-1 / 2$ ) inches of binder mixture on a base course of a minimum of six (6)
inches of concrete, to match the existing pavement as directed by the Engineer.
(3) The following requirements apply:
(a) Before the top course is installed, an additional width of asphalt beyond the edge of new base course shall be saw-cut and removed from all edges of trenches to a depth to accommodate the specified top course and the entire area restored. This additional removal shall be in accordance with paragraph (b) below.
(b) Pavement excavation along with saw cutting of pavements for sewer and water main trenches shall be in accordance with Section 71.21-Pavement Excavation of the Standard Sewer And Water Main Specifications.
(c) At locations requiring the installation of a concrete base course, a reflective cracking membrane shall be installed over joints prior to restoration, the cost of which shall be deemed included in the prices bid for all pavement restoration items. Additionally, appropriate pavement keys as described below shall be used.
(d) Pavement keys Type B-1 shall be used to insure a desired four (4) inch curb reveal (two and one-half (2-1/2) inch absolute minimum). Pavement key Type A shall be used in all intersections. Both keys are to be per Bureau of Highways Operations 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:

$\frac{\text { Item No. }}{\text { 4.02 AB-R }}$| Item |
| :--- |
| Asphaltic Concrete Wearing <br> Course, $1-1 / 2^{\prime \prime}$ Thick |

4.02 CB Asphaltic Binder Mixture
4.04 H Concrete Base For Pavement,

## Payment Description

(For asphaltic concrete wearing course top course when no overlay is required.)
(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.)
(For concrete base course over trenches

[^13]
## D. AMENDMENTS 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, Paragraph 13. Special Fittings:, Page 5;
Add the following to Paragraph 13:
The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

# HAZ - PAGES 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 AMENDING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS TO THE SAME EXTENT AS IF IT WAS ORIGINALLY INCLUDED HEREIN.

## Table of Contents

ITEM 8.01 Cl HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOILS ..... HAZ-1
ITEM 8.01 C 2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOILS FOR DISPOSAL PARAMETERS ..... HAZ - 7
ITEM 8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOILS ..... HAZ -9
ITEM 8.01 S HEALTH AND SAFETY ..... HAZ -15
ITEM 8.01 W1 REMOVAL, TREATMENT AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER ..... HAZ -20
ITEM 8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER ..... HAZ - 27
Attachments 1. New York City Department of Environmental Protection Limitations for Effluent to Storm-Sanitary or Combined Sewers Parameters
2. Applicable Regulations
3. Definitions
4. Phase I Corridor Assessment Report
(NO TEXT ON THIS PAGE)

## ITEM 8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOILS

### 8.01 C1.1 WORK TO INCLUDE

General: This work shall 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 chemical products but cannot be classified as hazardous waste. For the purpose of this specification, soil shall be defined as any material excavated below the pavement and base for pavement.

Non-hazardous contaminated soils are defined as soils exhibiting one or more of the following characteristics:

- Elevated Photo-Ionization Detector (PID) readings, subsequently confirmed by lab analysis
- Visual evidence of contamination
- Petroleum and/or chemical odors
- Soils that have been documented as contaminated in previous environmental reports

Non-hazardous contaminated soils must be stockpiled at an off-site approved location or secured onsite by the Contractor, meeting all required Federal, State and Local stipulations. Sampling and laboratory analysis must be conducted to determine if the soils are hazardous, unless the alternative procedure as defined under subsection 8.01 C 1.1 A .5 has been agreed upon by treatment facilities. Contaminated soils determined to be non-hazardous shall be handled in accordance with the specifications herein for Item 8.01 C 1 . Contaminated soils determined to be hazardous shall be handled in accordance with the specifications for Item 8.01 H - Handling, Transporting and Disposal of Hazardous Soils.

The Contractor shall retain the services of an independent Environmental Consultant, as specified under Item 8.01 S - Health and Safety, to oversee the work required under this Item.
Non-hazardous soils shall be delivered to the disposal or treatment facility within thirty (30) calendar days after excavation.

The Contractor shall conduct sampling and analysis of the impacted soils as specified under Item 8.01 C2 - Sampling and Testing of Contaminated/Potentially Hazardous Soils for Disposal Parameters. The laboratory results shall be forwarded to DDC Program Administration, Engineering Support Services (ESS) for review to determine if the soils will be handled and disposed of as contaminated regulated soils or hazardous waste. No other soils shall be sampled or tested without the DDC's approval or direction.

The Contractor shall 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 shall document the excavation, handling, transportation and disposal of nonhazardous contaminated soils. The Contractor shall supply all equipment, material and labor required to conduct the specified work of this Item.
A. Material Handling Plan: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The MHP shall, 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. Name, address, New York State Department of Health's (DOH) Environmental Laboratories Accreditation Program (ELAP) status and telephone number of the proposed laboratory for analysis of representative soil samples. The ELAP for the intended analysis must approve the laboratory.
4. Identification of the Contractor's proposed waste transporter(s). This information shall include:
a. Name and Waste Transporter Permit Number
b. Address
c. Name of responsible contact for the hauler
d. Telephone number for the contact
e. Any and all necessary permit authorizations for each type of waste transported
f. Previous experience in performing the type of work specified herein
5. 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 or treatment 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.
6. A backup facility should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
7. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for non-hazardous contaminated soils (primary and back-up) for final disposal of the soils. The primary TSD shall be an approved soil recycling/treatment facility. The backup facility may be a recycling/treatment facility or a New York State Department of Environmental Conservation (DEC) approved lined landfill or other facility approved by DEC to accept this material. The information required for each facility shall include:
a. Facility name and the State identification number
(1) Facility location
(2) Name of responsible contact for the facility
(3) Telephone number for contact
(4) Signed letter of agreement to accept waste as specified in this contract
(5) Unit of measure utilized at 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 shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
e. The Contractor shall 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 shall be provided. The source and nature of the cause of violation shall be stated, if known.
8. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

### 8.01 C1.2 MATERIALS

A. Containers shall be as required in the United State Department of Transportation (DOT)
regulations.
B. Polyethylene to be placed under ( 20 mil. thickness minimum) and over ( 10 mil. thickness minimum) soil piles.
C. The Contractor shall assure that the waste hauler's appropriate choice of vehicles and operating practices shall prevent spillage or leakage of contaminated material from occurring en route.
D. The Contractor shall provide, install and maintain any temporary loading facilities on site as required until completion of material handling activities. The location and design of any facilities shall be included in the MHP and be approved by the Program Administration, ESS.

### 8.01 C1.3 CONSTRUCTION DETAILS

## A. Material Handling

1. Immediately after excavation of non-hazardous contaminated soil the Contractor shall:
a. Load material directly onto trucks/tankers/roll offs for disposal off site; or
b. If interim stockpiling is required, place on a minimum of 20 mil. or equivalent plastic ground cloth and cover by minimum of 10 mil . polyethylene sheeting or equivalent to protect against leaching or runoff of contaminants into 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 weather. Grade surrounding surface to provide for positive drainage away from pile. Stockpile shall not exceed 100 cubic yards.
2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the public from contaminated materials as described in the approved MHP and Item 8.01 S - 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 independent Environmental Consultant promptly notified. 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 shall be disposed of in accordance with Item 8.01 W 1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.
5. Provide and operate field organic vapor test equipment, a PD or a flame ionization detector (FID), to detect general organic vapor levels at intervals of approximately fifty (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 independent Environmental Consultant.

## B. Off-Site Transportation to Disposal or Treatment Facility

1. General
a. The Contractor shall furnish all labor, equipment, supplies and incidental costs required to transport contaminated material from the work area to the off-site disposal or treatment facility, and any other items and services required for transporting contaminated material for disposal at an off-site facility.
b. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and en-route to the off-site scale. The Contractor shall be responsible for tracking all material/vehicles from the site to the off-site scale.
c. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.
d. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.
e. The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.
f. The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipments. The letter shall 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.
g. The Program Administration, ESS shall review and approve waste profiles before transportation to the TSD facility.
2. Hauling
a. The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the disposal or treatment facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
b. The Contractor shall 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 shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to and between acceptances of loads.
d. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
e. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Any use of substitute or additional transporters must have previous written approval from the Program Administration, ESS at no additional cost to the City.
f. The Contractor shall develop, document, and implement a policy for accident prevention.
g. The Contractor shall not combine contaminated materials from other projects with material from this project.
h. No material shall be transported until approved by the DDC.
3. Off-Site Disposal
a. The Contractor shall use only the facility(ies) identified in the MPH for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Administration, ESS, and if approved shall be at no extra cost to the City.
b. The Contractor shall 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 that the facility provides the stated treatment and/or disposal services.
c. The DDC reserves the right to contact and visit the disposal or treatment 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 DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done at no extra cost or delay to the City.
e. The Contractor shall 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 shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.
4. Equipment and Vehicle Decontamination
a. The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work will be paid under Item 8.01 S - Health and Safety.
b. Water generated during the decontamination process shall 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

Quantities for non-hazardous contaminated soils shall be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection $8.01 \mathrm{C} 1.3 . \mathrm{B} 1$, that are capable of generating load tickets.

### 8.01 C1.5 PRICE TO COVER

A. The unit bid price bid per ton for Item 8.01 C 1 shall 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 nonhazardous contaminated soil.
B. Final disposal of hazardous soil shall be paid for under Item 8.01 H - Handling, Transporting and Disposal of Hazardous Soils. Disposal of decontamination water shall be paid for under Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.
C. Backfill will be paid for under its respective item as specified in the contract document.
D. The independent Environmental Consultant shall be paid under Item 8.01 S - Health and Safety.

Payment will be made under:
ITEM NUMBER
ITEM

## ITEM 8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/ POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PARAMETERS

### 8.01 C2.1 WORK TO INCLUDE

A. Description

The work shall consist of collecting and analyzing representative soil samples for parameters typically requested by the disposal facilities.
B. Sampling and Laboratory Analysis

1. At least thirty (30) days prior to the commencement of work, the Contractor's independent Environmental Consultant must submit a Soil Sampling Plan/Field Sampling Plan (SSP/FSP) to the Program Administration, Engineering Support Services (ESS) for review and approval. The plan shall include the name, address, DOH's ELAP status, and telephone numbers of the proposed laboratory. The plan shall also include training and experience of the personnel who will collect the samples.
2. The Contractor shall sample and analyze representative samples of the contaminated/potentially hazardous soils. For stockpiled soils, the Contractor shall collect and analyze one (1) composite sample per 500 cubic yards or fraction thereof. Each composite sample shall consist of a minimum of five (5) grab samples collected from greater than two (2) feet below the soil surface. For drummed soil, the Contractor shall collect one (1) composite sample per (ten) 10 drums or fraction thereof. Each composite sample shall consist of a grab sample from each of the ten (10) drums or fraction thereof. Each composite sample shall be analyzed for Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics (Ignitability, Reactivity, Corrosivity), Full Toxicity Characteristic Leaching Procedure (TCLP) (including RCRA metals, volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), pesticides, herbicides), Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs). All samples collected should be analyzed on a five (5) calendar days turn around time and analytical results must be submitted to Program Administration, ESS upon receipt of the analytical results.
3. All sampling shall be conducted by a person trained in sampling protocols using standard accepted practices for obtaining representative samples.
4. The Contractor must also 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 shall be included in the bid price of this Item.
5. The quality of the data from the sampling program is the Contractor's responsibility. The Contractor must furnish all qualified personnel, equipment and instruments necessary to carry out the sampling. Unless directed otherwise, all sampling procedures must follow the DEC sampling guidelines and protocols.
6. All sample containers shall be marked and identified with legible sample labels which shall 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 shall be tracked from laboratory issuance of sample containers through laboratory receipt of the samples.
7. The Contractor shall maintain a bound sample logbook. The Contractor shall provide DDC access to it at all times and shall turn it over to the DDC in good condition at the completion of the work. The following information, as a minimum shall be recorded to the log:
8. Sample identification number
9. Sample location
10. Field observation
11. Sample type
12. Analyses
13. Date/time of collection
14. Collector's name
15. Sample procedures and equipment utilized
16. Date sent to laboratory and name of laboratory
17. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described in subsection B2, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described in subsection B2, as determined by industry laboratory pricing standards.
18. 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.
19. Soils exceeding any of the hazardous characteristic criteria meet the legal definition of hazardous soils (rather than non-hazardous contaminated soils) and shall be transported or disposed of under Item 8.01 H - Handling, Transporting and Disposal of Hazardous Soils. 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.

### 8.01 C2.2 METHOD OF MEASUREMENT

Quantities for samples shall be measured as the number of sets of samples that are tested. A set shall be defined as one (1) composite sample analyzed for the full range of parameters as specified in subsection B2.

### 8.01 C2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 C 2 shall 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 sampling and testing of contaminated/potentially hazardous soil.

Payment will be made under:
ITEM NUMBER ITEM
PAYMENT UNIT
8.01 C 2
Sampling and Testing of Contaminated/
Potentially Hazardous Soil for Disposal Parameters

Set

## ITEM 8.01 H HANDLING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS SOILS

### 8.01 H. 1 WORK TO INCLUDE

General: This work shall consist of the handling, transportation and disposal of soils or materials that are listed as hazardous wastes or 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. For the purpose of this specification, soils shall be defined as any materials excavated below the pavement and base for pavement.
Contaminated soils determined to be hazardous under Item 8.01 C 2 shall be handled, transported, and disposed of under Item 8.01 H in accordance with the specifications herein.
The independent Environmental Consultant retained by the Contractor, as specified under Item 8.01 S - Health and Safety, shall conduct sampling and analysis of above soils to determine which soils are hazardous.
All work under Item 8.01 H shall be performed under the direct supervision of the Contractor's Environmental Consultant, as approved by the Program Administration, Engineering Support Services (ESS).

The Contractor shall 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.

The Contractor shall document the excavation, handling, sampling, and testing, transportation and disposal of hazardous soils. The City shall be listed in the disposal documents as the waste generator.

The Contractor shall supply all equipment, material and labor required to conduct the specified work of this section.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation and disposal of hazardous soils are conducted in a manner to protect site personnel, the public and the environment, in accordance with all applicable Federal, State, and Local laws and regulations.
The Contractor shall decontaminate all equipment prior to its removal from the exclusion zone and/or following contact with hazardous materials, as detailed in Item $8.01 \mathrm{~S}-$ Health and Safety. Water generated during the decontamination process shall be disposed of under Item 8.01 W1-Removal, Treatment and Discharge/Disposal of Contaminated Water.
A. Material Handling Plan: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:

1. The Contractor's procedures for identifying contaminated/potentially hazardous soils during excavation, including instrumentation and calibration procedures to be used.
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.
3. Identification of the Contractor's proposed waste transporter(s). This information shall include:
a. Name and waste transporter permit number
b. Address
c. Name of responsible contact for the hauler
d. Telephone number for the contact
e. Any and all necessary permit authorizations for each type of waste transported
f. Previous experience in performing the type of work specified herein
4. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures could include, but are not limited to, agreements from the intended disposal or treatment 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 or the use of off-site stockpiling locations approved by the DEC.
5. A backup facility, should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
6. Identification of the Contractor's two proposed United State Environmental Protection Agency (EPA) or DEC approved RCRA TSD facilities for hazardous soils.
7. The Contractor shall submit the following information prior to any transportation of soils regarding the temporary and final off-site TSD or facilities where it is proposing to take hazardous soils. The expense of furnishing all information will be included in the Contractor's bid price:
a. General Information
(1) Facility name and the EPA identification number
(2) Facility location
(3) Name of responsible contact for the facility
(4) Telephone number for contact
(5) Signed letter of agreement to accept waste as specified in this contract
(6) Signed letter of agreement with a TSD for disposal of waste that may not be land-disposed
(7) Unit of measure utilized at each 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 as they pertain to receipt and management of wastes derived from this Contract.
c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility.
d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
e. The Contractor shall provide the date of the proposed facility(ies) last compliance inspection under RCRA.
f. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be approved. The source and nature of the cause of violation shall be stated, if known.
8. Description of all sampling and analyses that will be needed to obtain disposal facility approval.

### 8.01 H. 2 MATERIALS

A. Containers shall be watertight as required in the DOT regulations and must meet all applicable regulations including but not limited to those in Attachment 2.
B. Polyethylene ( 20 mil. thickness minimum) to be placed under and ( 10 mil. thickness minimum) over soil piles. If soils are placed in drums, polyethylene must be placed over the drums.

### 8.01 H1.3 CONSTRUCTION DETAILS

## A. Material Handling

1. The Contractor shall institute procedures to protect site personnel and the public from the non-hazardous and hazardous materials as described in Section 8.01 S - Health and Safety.
2. The Contractor shall handle hazardous soil as approved in the MHP.
3. Stockpiled materials at the temporary TSD facility shall be handled according to the facility requirements but at a minimum: shall be drummed or placed on and covered with polyethylene to protect against erosion and leaching into surrounding soils, the stockpile area shall be graded for positive drainage away from the pile, and shall be labeled while being held for sampling prior to permanent disposal.
4. Provide any dewatering that is necessary to complete the work. Water shall be disposed of in accordance with Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.

## B. Off-Site Transportation and Disposal

1. The Contractor shall furnish all labor, equipment and supplies required to transport hazardous materials from the work area to the off-site TSD facility(ies) and to acquire any other items and services required for transporting hazardous materials for storage and/or disposal at an approved off-site facility.
2. Weight Measurement
a. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and on-route to the off-site scale. The Contractor shall be responsible for tracking all materials/vehicles from the site to the off-site scale.
b. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.
3. General
a. Manifests: The Contractor shall organize and maintain the material shipment records/manifests required by law.
b. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.
c. The Contractor shall inspect all vehicles leaving the project site to ensure that hazardous soils adhering to the wheels or under carriage are removed prior to the vehicle leaving the site.
d. The Contractor shall obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments. The letter shall 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.
4. Hauling
a. The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.
b. The Contractor shall coordinate manifesting, placarding, of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
c. The Contractor shall be held responsible, at its own expense, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
d. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to any use other than hauling hazardous materials.
e. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
f. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from the DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
g. The Contractor shall develop, document, and implement a policy for accident prevention.
h. The Contractor shall not combine hazardous materials from other projects with material from this project.
i. The Contractor shall obtain for the City an EPA hazardous waste generator identification number and a representative of Program Administration, ESS will review and sign the manifest as the generator.
j. No materials shall be transported until approved by the DDC.
5. Off-Site Disposal
a. The Contractor shall be responsible for acceptance of the materials at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated storage and/or disposal services.
b. 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 DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.
c. The Contractor shall submit all results and weights to the DDC.
d. 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 New York State DEC annual hazardous waste regulatory fee program. The Contractor shall submit a copy of proof of payment to the DDC and Program Administration, ESS.
6. Equipment and Vehicle Decontamination

The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work shall be paid under Item 8.01 S - Health and Safety. Disposal of decontamination liquids is described under Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.
7. Record Keeping

The Contractor shall 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 shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.

### 8.01 H. 4 METHOD MEASUREMENT

Quantities for hazardous soil shall be measured in tons satisfactorily delivered to the treatment, storage or disposal facility. The tonnage will be determined by off-site truck scales, as per subsection $8.01 \mathrm{H1} .3 . \mathrm{B} .2$, that are capable of generating load tickets.

### 8.01 H.5 PRICE TO COVER

A. The unit price bid per ton for Item 8.01 H shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, permits, fees, taxes, stockpiling, hauling, and any other incidentals necessary to complete the work as specified herein for handling, transporting and disposal of hazardous soils.
B. Final disposal of non-hazardous materials shall be paid for under Item 8.01 C 1 - Handling, Transporting and Disposal of Non-Hazardous Soils. Disposal of decontamination water shall be paid under Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.

C The independent Environmental Consultant shall be paid under Item 8.01 S - Health and Safety.
D. Backfill will be paid for under its respective item.

## Payment will be made under:

8.01 H Handling, Transporting, and Disposal of Hazardous Soils 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 his work in a safe manner. The Contractor shall implement a Health and Safety Plan (HASP) for contaminated/hazardous soil intrusive activities as set forth in Occupational Safety and Health Administration (OSHA) Standards 1910.120 and 1926.650-652. The Contractor shall ensure that all workers have at a minimum hazard awareness training. The Contractor shall segregate contaminated work area in secured exclusion zones. These zones shall limit access to Contractor personnel specifically trained to enter the work area. The exclusion zone shall be set up to secure the area from the public and untrained personnel. The project health and safety program shall apply to all construction personnel including persons entering the work area. In addition, the Contractor shall protect the public from on-site hazards, including subsurface contaminants associated with on-site activities. The HASP shall be signed off by a Certified Industrial Hygienist and reviewed by Program Administration, Engineering Support Services (ESS).
Work shall 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 a HASP: The HASP 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 HASP 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. Environmental Consulting Services

The Contractor shall retain an independent Environmental Consultant to obtain all permits and perform all field screening, air monitoring, community air monitoring, soil sampling, and health and safety services. The independent Environmental Consultant shall at a minimum provide documentation to the Program Administration, ESS demonstrating the minimum requirements as set forth below:

1. The independent Environmental Consultant project supervisor on site and other designated key personnel shall have a minimum of three (3) years experience in the environmental field dealing with issues associated with contaminated soils. Such experience shall include oversight on environmental, specifically volatile organic compound and dust monitoring services as a routine part of its daily operations.
2. The independent Environmental Consultant must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
3. The independent Environmental Consultant shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall 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 shall 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 shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the independent Environmental Consultant shall provide site specific training.
5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall 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 shall submit, within forty-five (45) calendar days after the contract award, a written HASP as specified herein, to Program Administration, ESS for review and comment. The Contractor shall make all necessary revisions required by Program Administration, ESS and resubmit the HASP to the Program Administration, ESS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by the Program Administration, ESS.
2. Daily safety logs shall be maintained by the Contractor and shall be submitted to the DDC either on request or on completion of the work. Training logs shall be maintained by the Contractor and submitted to the DDC either on request or on completion of the work. Daily logs on air monitoring during excavation activities shall be prepared and maintained by the Contractor and submitted to the DDC either on request or upon completion of the work.
3. A closeout report shall be submitted by the Contractor to the DDC upon completion of the work within the defined exclusion zones. This report shall summarize the daily safety and monitoring logs and provides an overview of the Contractor's performance regarding environmental and safety issues. The report shall carefully document all areas
where contamination has been found including pictures, addresses of locations, and potential sources.
4. Medical Surveillance Examinations: The Contractor shall submit to the DDC 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) shall be provided to the DDC for all construction personnel who are to enter the exclusion zones.
5. Accident Reports: All accidents, spills, or other health and safety incidents shall be reported to the DDC.

## D. Health and Safety Plan

The HASP shall comply with OSHA regulations 29 CFR 1910.120/1926.65. This document shall 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 control, dust control, vapor/odor suppression procedures
14. Identification of the nearest hospital and route
15. Confined space procedures
16. 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 shall include all labor, materials, equipment, and insurance necessary to complete the work in accordance with these specifications. The price bid shall 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 shall be included in the price of this item. Disposal of decontamination fluid shall be paid for under Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.

## E. Spill Control

1. Payment shall 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 shall 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 C 1 - Handling, Transporting and Disposal of Non-Hazardous Contaminated Soils, 8.01 C 2 - Sampling and Testing of Contaminated/Potentially Hazardous Soil for Disposal Parameters or 8.01 H - Handling, Transporting and Disposal of Hazardous Soils, as appropriate.

## F. Dust Control

Payment shall 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 DOH Community Air Monitoring Plan (CAMP) may be used as guidance.

## G. Vapor/Odor Suppression

Payment shall 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. Mobilization/Demobilization

1. Mobilization

Payment shall include 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 shall 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 NUMBER
ITEM
PAYMENT 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 shall consist of the proper removal and disposal of all contaminated groundwater and decontamination water generated during construction operations. The Contractor shall 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 combined sanitary/storm sewer system or removing contaminated water for off-site disposal. The Contractor shall be responsible to choose a method compatible to the construction work and shall 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 shall 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 shall at a minimum provide documentation to the Program Administration, Engineering Support Services (ESS) demonstrating the minimum requirements as set forth below:

1. The Specialist shall 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 shall 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 DEC.
3. The Specialist shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years of a similar nature, size, and complexity to this one.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall 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 shall 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 shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Specialist shall be responsible to provide site-specific training to its employees and other affected personnel.
5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall 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 shall 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 shall 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 combined sanitary/storm sewer system, the Contractor shall ensure the Specialist treats the water to comply with the New York City Department of Environmental Protection (DEP) Sanitary/Combined and Storm Sewer Effluent Limit concentrations prior to discharge. The Contractor is responsible for providing settling or filtering tanks and any other apparatus required by DEP. 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 shall submit to the Program Administration, ESS for review, a Water Handling Plan (WHP). The WHP must be approved by the Program Administration, ESS, 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 combined sanitary/storm sewer or off-site disposal). The Contractor shall maintain a complete, up to date copy of the WHP on the job site at all times.

### 8.01 W1.2 CONSTRUCTION DETALLS

For each disposal method the Contractor proposes to utilize (disposal to combined sanitary/storm sewer or off-site disposal), the WHP shall include the information required in paragraphs A and B below, as appropriate.
A. On-site treatment and discharge into New York City combined sanitary/storm sewers.

1. Regulations: The Contractor shall comply with all applicable regulations. This includes but may not be limited to:

Title 15-New DEP 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 (DEP Division of Sewer Regulation and Control), if discharge to sewer exceeds 10,000 gallons per day.
c. The Contractor shall comply with DEC State Pollutant Discharge Elimination System (SPDES) Permit Number GP-0-10-001, General Permit for Stormwater Discharges.
d. Long Island well point permit for Brooklyn and Queens sites, if well points are used for dewatering.
e. Wastewater quality control application, DEP.
3. The WHP for this portion of the work shall include at a minimum:
a. Identification and design of Contractor's proposed treatment to assure that the water meets the DEP 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 independent Environmental Consultant.
d. Copies of all submitted permit applications and approved permits the Contractor have received.
4. Materials

The Contractor shall supply all settling or filtering tanks, pumps, filters, treatment devices and other appurtenances for treatment, temporary storage and disposal of contaminated water. All equipment shall 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 DEP Sanitary/Combined and Storm sewer Effluent Limit concentrations. The quality of the data is the Contractor's responsibility. Any sampling and testing shall be conducted and paid in accordance with Item 8.01 W2 - Sampling and Testing of Contaminated Water.
e. The Contractor shall 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 DEC.
f. Disposal of Treatment Media
(1) The Contractor shall be responsible for disposal or recycling of treatment media in accordance with all Federal, State and Local regulations.
(2) The Contractor shall provide the DDC 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 shall not be considered as a separate pay item; instead it shall be considered as incidental work thereto and included in the unit price bid.

## B. Off-Site Disposal

1. Regulations: The Contractor shall 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 shall be submitted to the DDC prior to initiating any off-site disposal:
a. (1) Name and waste transporter permit number
(2) Address
(3) Name of responsible contact for the hauler
(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 EPA 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 shall also be noted.
e. The Contractor shall 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 shall identify the capacity available in the units and the capacity reserved for the subject waste.
f. The Contractor shall 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 shall be submitted. The source and nature of the cause of violation shall be stated, if known. If groundwater contamination is noted, details of the facility's groundwater monitoring program shall be provided.
h. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

## 3. Materials

All vessels for temporary storage and transport to an off-site disposal facility shall be as required in DOT regulations.
4. Execution
a. General
(1) The Contractor shall organize and maintain the material shipment records/manifests required by Federal, State and Local law. The Contractor shall include all bills of lading, certificates of destruction, recycling or treatment and other applicable documents.
(2) The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.
(3) The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated liquids are not spilling and are contained for transport.
(4) The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipment. The letter shall 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 shall 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 shall be conducted and paid in accordance with Item 8.01 W2 - Sampling and Testing of Contaminated Water.
(7) The Contractor shall be 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 shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.
(2) The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall 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 DDC and shall be resolved by the Contractor to the satisfaction of the DDC.
(3) The Contractor shall be held responsible for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust
tracked off-site. This cleanup shall be accomplished at the Contractor's expense.
(4) The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance and weight restrictions.
(5) The Contractor shall 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 DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
(6) The Contractor shall develop, document, and implement a policy for accident prevention.
(7) The Contractor shall not combine waste materials from other projects with material from this project.
(8) The Contractor shall obtain for the City a hazardous waste generator identification number and will sign the manifest as the generator, if necessary.
(9) No material shall be transported until approved by the DDC.
c. Disposal Facilities
(1) The Contractor shall use only the TSD facility(ies) identified in the WHP for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Administration, ESS, and, if approved, shall be at no extra cost to the City.
(2) The Contractor shall 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 DDC 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 his 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 DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.
d. Equipment and Vehicle Decontamination
(1) The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting the exclusion zone. The cost for this work shall 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 shall be on a per day basis.

### 8.01 W1.4 PRICE TO COVER

A. The per day price bid for Item 8.01 W 1 shall 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 DEP Sewer Discharge Limits.

Payment will be made under:
ITEM NUMBER
ITEM PAYMENT UNIT
8.01 W1

Removal, Treatment and Disposal/Discharge of Contaminated Water

## ITEM 8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER

### 8.01 W2.1 WORK TO INCLUDE

A. Description

The work shall 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

1. The Contractor is responsible, at a minimum, for sampling and testing of contaminated water for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations as listed in Attachment 1. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities shall be included in the bid price of this Item.
2. All sampling and testing shall be conducted by a person trained in sampling protocols using accepted standard practices and/or the DEC sampling guidelines and protocols.
3. All sample containers shall be marked with legible sample labels which shall 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 shall be tracked from laboratory issuance of sample containers through receipt of the samples.
5. The Contractor shall maintain a bound sample log book. The Contractor shall provide the DDC access to it at all times and shall turn it over to the DDC in good condition at the completion of the work. The following information, as a minimum, shall 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 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 shall 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 DOH'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 DDC 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 shall 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 shall be measured as the number of sets of samples that are tested for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations. A set shall be defined as one (1) representative sample analyzed for the full range of DEP parameters as specified in attachment 1.

### 8.01 W2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 W2 shall 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 shall be included in the bid price of this Item.

Payment will be made under:
ITEM NUMBER
ITEM
PAYMENT UNIT
8.01 W2

Sampling and Testing of Contaminated Water
Set

## ATTACHMENT 1

New York City Department of Environmental Protection Limitations for Discharge To Storm, Sanitary/Combined Sewer

## NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTEWATER TREATMENT

Limitations for Effluent to Sanitary or Combined Sewers

| Parameter ${ }^{1}$ | Daily <br> Limit | Units | Sample Type | Monthly Limit |
| :---: | :---: | :---: | :---: | :---: |
| Non-polar material ${ }^{2}$ | 50 | mg/l | Instantaneous | --- |
| pH | 5-11 | SU's | Instantaneous | --- |
| Temperature | <150 | Degree F | Instantaneous | --- |
| Flash Point | $>140$ | Degree F | Instantaneous | --- |
| Cadmium | $\begin{aligned} & \hline 2 \\ & 0.69 \end{aligned}$ | $\mathrm{mg} / 1$ <br> $\mathrm{mg} / 1$ | Instantaneous Composite | --- |
| Chromium (VI) | 5 | $\mathrm{mg} / 1$ | Instantaneous | --- |
| Copper | 5 | $\mathrm{mg} / \mathrm{l}$ | Instantaneous | --- |
| Lead | 2 | $\mathrm{mg} / 1$ | Instantaneous | --- |
| Mercury | 0.05 | $\mathrm{mg} / \mathrm{l}$ | Instantaneous | --- |
| Nickel | 3 | $\mathrm{mg} / \mathrm{l}$ | Instantaneous | --- |
| Zinc | 5 | $\mathrm{mg} / 1$ | 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 | --- |
| Toluene | 74 | ppb | Instantaneous | 28 |
| $1,2,4$ <br> Trichlorobenzene | --- | --- | Composite | --- |
| 1,1,1 Trichloroethane | --- | --- | Composite | --- |
| Xylenes (Total) | 74 | ppb | Instantaneous | 28 |
| PCB's (Total) ${ }^{3}$ | 1 | ppb | Composite | --- |
| Total Suspended Solids (TSS) | $350^{4}$ | $\mathrm{mg} / 1$ | Instantaneous | --- |
| $\mathrm{CBOD}^{5}$ | --- | --- | Composite | --- |
| Chloride ${ }^{5}$ | --- | --- | Instantaneous | --- |
| Total Nitrogen ${ }^{5}$ | -- | --- | Composite | --- |
| Total Solids ${ }^{5}$ | --- | --- | Instantaneous | --- |
| Other |  |  |  |  |

1
All handling and preservation of collected samples and laboratory analyses of samples shall 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 shall 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 EPA method 1664 Rev. A. Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N-Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.

3 Analysis for $\mathrm{PCB}=\mathrm{s}$ is required if both conditions listed below are met:

1) if proposed discharge $\geq 10,000$ gpd;
2) if duration of a discharge $>10$ days.

Analysis for $\mathrm{PCB}=\mathrm{s}$ must be done by EPA method 608 with MDL= $=65 \mathrm{ppt}$. 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).

For discharge $\geq 10,000 \mathrm{gpd}$, the TSS limit is $350 \mathrm{mg} / \mathrm{l}$. For discharge $<10,000 \mathrm{gpd}$, 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 $\geq 10,000$ gpd.

## ATTACHMENT 2

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. New York State Department of Environmental Conservation (DEC), Spills Technology and Remediation Series (STARS) Memo \#1
3. 6 NYCRR 360-1 DEC 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
12. 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, EPA Office of Emergency and Remedial Response Publication, 9285.1-03
19. NIOSH / OSHA / USCG / EPA 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 shall be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

## ATTACHMENT 3

Definitions

Contaminated Groundwater and Decontamination Fluids: Groundwater within the excavation trench or decontamination water that contains regulated compounds above the NYCDEP Discharge to Sanitary/Combined Sewer Effluent limits.
Disposal or Treatment Facility: A facility licensed to accept either non-hazardous regulated waste or hazardous waste for either treatment or disposal.
Exclusion Zone: 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.
Hazard Assessment: An assessment of any physical hazards that may be encountered on a work site.
Hazardous Soils: 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.

Hazardous Substance Evaluation: 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.
Health and Safety Plan: 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.
Material Handling Plan: 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.
PCBs: Polychlorinated biphenyls are a group of toxic compounds commonly used as a coolant in transformers and other electrical components.
Photoionization Detector: A hand held instrument used to measure volatile organic compounds in air. The instrument ionizes the organic molecules through the use of an ultraviolet lamp.
RCRA Hazardous Waste Characteristics: Characteristics of a material which may indicate the material is hazardous. These include: ignitability corrosivity, reactivity, and toxicity.
Total Petroleum Hydrocarbons: An analytical procedure used to determine the total amount of petroleum compounds in a material.

## ATTACHMENT 4

Phase II Corridor Assessment Report
(NO TEXT ON THIS PAGE)

Phase II Subsurface Corridor Investigation Report
For

# HYLAN BOULEVARD BUS PADS FOR SELECT BUS SERVICE <br> HYLAN BOULEVARD AREAS <br> STATEN ISLAND, NEW YORK 

DDC PROJECT NO. HWR100PAD
WORK ORDER NO. 10779-LIRO-3-10011
CONTRACT REGISTRATION NO. 20151405569

Prepared for:


Department of Design and Construction

Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:


LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211
PROJECT NO. 15-008-0265

December 15, 2015

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... ES-1
1.0 INTRODUCTION .....  1
1.1 SCOPE OF WORK .....  1
2.0 CORRIDOR INFORMATION ..... 3
2.1
CORRIDOR Location, DESCRIPTION and USE ..... 3
2.2 DESCRIPTION OF SURROUNDING PROPERTIES .....  3
2.3 Corridor and Regional Topographic Setting ..... 3
2.4 CORRIDOR AND REGIONAL GEOLOGY .....  3
2.5 Corridor and Regional Hydrogeology .....  4
3.0 CORRIDOR EVALUATION. .....  .5
3.1 SOIL Quality Investigation .....  5
3.2 Groundwater Quality Investigation ..... 6
3.3 LABORATORY ANALYSES .....  6
3.4 Data Evaluation .....  .6
4.0 FINDINGS ..... 7
4.1 Field Screening ..... 7
4.2 SOIL LABORATORY ANALYTICAL RESULTS .....  7
4.2.1 Volatile Organic Compounds (VOCs) in Soil. ..... 7
4.2.2 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil .....  7
4.2.3 Polychlorinated Biphenyls (PCBs) in Soil. .....  8
4.2.4 Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) Metals in Soil. ..... 8
4.2.5 Waste Characterization of Soil .....  .8
5.0 CONCLUSIONS AND RECOMMENDATIONS ..... 10
6.0 STATEMENT OF LIMITATIONS ..... 12

| Tables | $\mathbf{1}$ | Summary of Environmental Boring Data |
| :--- | :--- | :--- |
|  | $\mathbf{2}$ | Summary of TCL VOCs Detected in Soil |
|  | $\mathbf{3}$ | Summary of PAHs Detected in Soil |
|  | $\mathbf{4}$ | Summary of PCBs Detected in Soil |
|  | $\mathbf{5}$ | Summary of Waste Characteristics Detected in Soil |
| Figures | $\mathbf{1}$ | Topographic Corridor Location Map |
|  | $\mathbf{2}$ | Sample Location Plan |
| Appendices | A | Boring Location Sketches |
|  | $\mathbf{B}$ | Geologic Boring Logs |
|  | C | Laboratory Analytical Results - Included on Attached CD |

## EXECUTIVE SUMMARY

On behalf of the New York City Department of Design and Construction (NYCDDC), LiRo Engineers, Inc. (LiRo) conducted a Phase II Subsurface Corridor Investigation (Phase II SCI) of the Hylan Boulevard Bus Pads for Select Bus Service (SBS) Corridor areas (hereinafter referred to as the Corridor). The areas include three (3) separate Corridor areas which are located along Hylan Boulevard in the Midland Beach, Dongan Hills, and Concord neighborhoods of Staten Island, New York.

The three (3) separate Corridor areas, which total approximately 377 linear feet, consist of the following:

## Corridor Area 1 - Midland Beach Neighborhood (Figures 2A and 3A)

- East side of Hylan Boulevard, north of Midland Avenue (approximately 110 linear feet)


## Corridor Area 2 - Dongan Hills Neighborhood (Figures 2B and 3B)

- West side of Hylan Boulevard, south of Sea View Avenue (approximately 122 linear feet)


## Corridor Area 3 - Concord Neighborhood (Figures 2C and 3C)

- West side of Hylan Boulevard, northwest of Mallory Avenue (approximately 145 linear feet)

This work was assigned as a priority project prompting an expeditious completion deadline due to the abbreviated schedule and a Phase I Corridor Assessment Report (CAR) was not completed for the Corridor areas. The intended purpose of the Phase II SCI was to assess the presence of subsurface contamination that may potentially impact the proposed construction activities. Excavation for the construction of bus pads is proposed along the Corridor areas. The Phase II SCI consisted of the following components:

- The advancement of three (3) borings per Corridor Area, totaling the advancement of nine (9) borings to a terminal depth of approximately 6 feet below ground surface (ftbg) or refusal, whichever was encountered first and the field screening of soil samples, including photo-ionization detector (PID) readings and visual and olfactory indicators of contamination (staining, odors);
- Borings SB-01 through SB-03 were advanced along Corridor Area 1, borings SB-04 through SB-06 were advanced along Corridor Area 2, and borings SB-07 through SB-09 were advanced along Corridor Area 3;
- The collection of nine (9) soil samples which were analyzed for the following parameters: (1) United States Environmental Protection Agency (USEPA) Target Compound List (TCL) volatile organic compounds (VOCs); (2) Polycyclic Aromatic Hydrocarbons (PAHs) via USEPA Method 8270C; (3) 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; 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.

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

In order to evaluate the subsurface soil quality, laboratory analytical results were compared with the regulatory standards identified in (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Unrestricted and Restricted Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); (2) NYSDEC CP-51 Soil Cleanup Levels (SCLs) which include Supplemental Soil Cleanup Objectives (SSCOs) to NYSDEC Subpart 375-6 and SCLs for gasoline/fuel oil contaminated soil; and/or (3) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and 6 New York City Code for Rules and Regulation (NYCRR) Part 371.

## Summary of Findings:

The subsurface soils encountered during this Phase II SCI consisted predominantly of brown to black fine to medium sand with some gravel and occasional clay layers from grade to 6 ftbg . Man-made materials (i.e., brick, gravel, etc.), which are indicative of urban fill, were encountered in the area of Hylan Boulevard and Midland Avenue, Hylan Boulevard and Bedford Avenue, and Hylan Boulevard and Mallory Avenue at depths ranging from grade to 6 ftbg . Groundwater was not encountered within the nine (9) soil borings to a depth of 6 ftbg ; however, what appeared to be perched groundwater was noted within SB-03 (Corridor Area 1) and SB-09 (Corridor Area 3). Bedrock was not encountered during the Phase II SCI.

## Corridor Area 1:

Field screening, including PID readings and visual and olfactory observations, identified PID readings ranging from 0.5 parts per million (ppm) to 155 ppm within borings SB-01, SB-02, and SB-03. In addition, two (2) of the borings, SB-01 and SB-02, had petroleum odors detected based on olfactory observations. These two (2) borings are located adjacent to an existing Mobil station located at 2150 Hylan Boulevard. A historical NYSDEC spill (No. 1010519) was identified for Exxon/Mobil located at 2150 Hylan Boulevard in the NYSDEC Spills database.

VOCs, including 1,2,4-Trimethylbenzene, ethylbenzene, n-propylbenzene, m\&p xylene, and/or 1methylnaphthalene, were detected at concentrations exceeding Unrestricted Use (Track 1) SCOs and/or CP-51 SCLs in SB-02. Acetone was also detected at concentrations above the Unrestricted Use (Track 1) SCO in samples SB-03. SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k) fluoranthene, chrysene, dibenz(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene, were detected at concentrations exceeding their corresponding Unrestricted Use (Track 1) SCOs, Restricted Use (Track 2) SCOs, and CP-51 SCLs in two (2) of the composite samples collected including SB-01 and SB-02. PCBs were not detected.

Hazardous waste characteristic testing indicated that the soil was non-hazardous. TPHC-DRO and TPHC-GRO were detected in Corridor Area 1 in the area of the Mobil Gas Station. There are no regulatory standards for TPHC-DRO and TPHC-GRO.

## Corridor Area 2:

Field screening (i.e., PID readings and visual and olfactory observations) did not identify any petroleumimpacted soils within Corridor Area 2.

No VOCs, SVOCs, or PCBs were detected in the three (3) composite samples collected from Corridor Area 2.

Hazardous waste characteristic testing indicated that the soil was non-hazardous. TPHC-DRO were detected in Corridor Area 2. There are no regulatory standards for TPHC-DRO and TPHC-GRO.

Department of Design and Construction

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## Corridor Area 3:

Field screening (i.e., PID readings and visual and olfactory observations) did not identify any petroleumimpacted soils within Corridor Area 3.

One (1) VOC, acetone, was detected at a concentration above the Unrestricted Use (Track 1) SCO in sample SB-08. SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and/or indeno(1,2,3-cd)pyrene, were detected at concentrations exceeding their corresponding Unrestricted Use (Track 1) SCOs, Restricted Use (Track 2) SCOs, and CP-51 SCLs in sample SB-09. VOCs and PCBs were not detected in the three (3) composite samples collected from Corridor Area 3.

Hazardous waste characteristic testing indicated that the soil was non-hazardous. TPHC-DRO were detected in Corridor Area 3. There are no regulatory standards for TPHC-DRO and TPHC-GRO.

## Conclusions and Recommendations

Based on 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 within Corridor Area 1, including PID readings and visual and olfactory observations, identified PID readings ranging from 0.5 ppm to 155 ppm within borings SB-01, SB-02, and SB-03. In addition, two (2) of the borings, SB-01 and SB-02, had petroleum odors detected based on olfactory observations. These two (2) borings are located adjacent to an existing Mobil gas station. Field screening (i.e., PID readings and visual and olfactory observations) did not identify any petroleum-impacted soils within Corridor Areas 2 or 3;
- Laboratory analytical results identified petroleum-impacted soils in Corridor Areas 1 and 3. Elevated concentrations of petroleum components (VOCs, PAHs, and/or TPHC-DRO/GRO) were present in subsurface soils in the Corridor areas located at Hylan Boulevard and Midland Avenue and Hylan Boulevard and Mallory Avenue. The presence of elevated concentrations of petroleum components in subsurface soils in the Corridor areas may be attributed to: (a) residuals from historical releases of petroleum products from nearby sites; and/or, (b) contaminants in historic fill material placed on the Corridor areas;
- The subsurface soil sampled did not exhibit hazardous waste characteristics;

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, petroleum-contaminated soil in Corridor Area 1 and 3 and of non-hazardous contaminated soil in Corridor Area 2. The Contractor should be required to submit a Material Handling Plan, to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Due to the presence of VOCs and PAHs in soil at the investigated sites, dust control procedures are recommended during excavation activities 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 proposed for all three (3) Corridor areas. A Community Air Monitoring Plan (CAMP) is recommended to be developed for Corridor Areas 1 and 3 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. Specific requirements shall be reviewed for each situation in consultation with NYSDOH to ensure proper applicability;
- While groundwater was not encountered during the Phase II SCI field activities, dewatering may be necessary during construction activities in the Corridor areas. If encountered, groundwater samples should be collected and analyzed for NYCDEP Sewer Discharge Limitations. Depending on those results, groundwater may require pre-treatment prior to discharge;
- In addition; should dewatering be necessary during construction activities within the Corridor areas, the contractor should be required to obtain NYCDEP sewer discharge permit. Lastly, if discharge into storm sewers (which ultimately discharge to surface water) is required during such 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 shall 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 VOCs and PAHs).

New York City Department of Design and Construction
Phase II Subsurface Corridor Investigation Report
Hylan Blvd. Bus Pads for SBS - Staten Island, NY

### 1.0 INTRODUCTION

On behalf of the New York City Department of Design and Construction (NYCDDC), LiRo Engineers, Inc. (LiRo) conducted a Phase II Subsurface Corridor Investigation (Phase II SCI) of the Hylan Boulevard Bus Pads for Select Bus Service (SBS) Corridor areas (hereinafter referred to as the Corridor). The three (3) separate Corridor areas, which total approximately 377 linear feet, consist of the following:

Corridor Area 1 - Midland Beach Neighborhood (Figures 2A and 3A)

- East side of Hylan Boulevard, north of Midland Avenue (approximately 110 linear feet)

Corridor Area 2 - Dongan Hills Neighborhood (Figures 2B and 3B)

- West side of Hylan Boulevard, south of Sea View Avenue (approximately 122 linear feet)


## Corridor Area 3 - Concord Neighborhood (Figures 2C and 3C)

- West side of Hylan Boulevard, northwest of Mallory Avenue (approximately 145 linear feet)

Infrastructure improvements consisting of new bus pads are proposed for the three (3) Corridor areas. The Phase II SCI was conducted to determine if the Corridor's environmental condition might impact proposed construction activities.

### 1.1 Scope of Work

The Phase II SCI consisted of a field investigation, laboratory analyses, 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. Drilling activities for the field investigation were performed by Aquifer Drilling and Testing, Inc. (ADT) of Mineola, New York. Oversight of drilling activities was performed by LiRo. Laboratory analyses were provided by Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts, a NYS Department of Health (NYSDOH) approved laboratory (No. 10899). Field derived Quality Assurance/Quality Control (QA/QC) samples (i.e., field blanks, trip blanks, and duplicates) were not collected for this project. The field investigation was conducted on November 18, 23, and 24, 2015 and consisted of the following components:

- The advancement of nine (9) borings (SB-01 through SB-09) to a terminal depth of 6 feet below ground surface (ftbg) or refusal, whichever was encountered first. Borings SB-01 through SB-03 were advanced along Corridor Area 1, borings SB-04 through SB-06 were advanced along Corridor Area 2, and borings SB-07 through SB-09 were advanced along Corridor Area 3. The borings were cleared to a depth of 6 feet using a hand auger and/or a vacuum excavator (Vacex). Soil samples were collected using disposable spoons. In addition, a Corridor specific Health and Safety Plan was prepared prior to commencing field work.
- Field screening, classification, and identification of soils from the ground surface to the bottom of each boring. Soil samples were visually classified in the field using the Unified Soil Classification System (USCS). Field screening consisted of visual and olfactory indicators of impacts as well as screening with a photoionization detector (PID).

Department of
Design and
New York City Department of Design and Construction
Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

- The collection of one (1) composite and one (1) grab sample from each of the three (3) boring for each Corridor Area, totaling nine (9) soil boring locations (SB-01 through SB-09). The composite samples were comprised of soil from the entire boring column. The grab samples were collected from the 6 -inch interval exhibiting evidence of petroleum impacts (highest PID reading) or from the bottom 6 -inch interval in each boring.
- Laboratory analysis of the composite samples for: (1) Polycyclic Aromatic Hydrocarbons (PAHs) via United States Environmental Protection Agency (USEPA) Method 8270C; (2) Polychlorinated Biphenyls (PCBs) via USEPA Method 3550B/8082; (3) Total Petroleum Hydrocarbon (TPHC) Diesel Range Organics/Gasoline Range Organics (TPHC-DRO/GRO) via USEPA Method 8015B; (4) Resource Conservation and Recovery Act (RCRA) Characteristics via USEPA SW-846; and, (5) Toxicity Characteristic Leaching Procedure (TCLP) RCRA Metals via USEPA SW-846.
- Laboratory analysis of the grab samples for TCL volatile organic compounds (VOCs) by USEPA Method 8260.


### 2.0 CORRIDOR INFORMATION

### 2.1 Corridor Location, Description and Use

The three (3) separate Corridor areas, which total approximately 377 linear feet, consist of the following areas within Staten Island, New York.

## Corridor Area 1 - Midland Beach Neighborhood

- East side of Hylan Boulevard, north of Midland Avenue (approximately 110 linear feet)


## Corridor Area 2 - Dongan Hills Neighborhood

- West side of Hylan Boulevard, south of Sea View Avenue (approximately 122 linear feet)


## Corridor Area 3 - Concord Neighborhood

- West side of Hylan Boulevard, northwest of Mallory Avenue (approximately 145 linear feet)

The location of each Corridor area is shown on Figure 1. The Corridor areas are characterized primarily by commercial storefronts including a Mobil Gas Station adjacent to the Hylan Boulevard and Midland Avenue Corridor area.

### 2.2 Description of Surrounding Properties

The areas surrounding the Corridor segments are characterized primarily by commercial storefronts and private residences. In addition to the adjacent gasoline station to the Hylan and Midland Corridor, an additional gasoline station was noted beyond the limits of the Corridor.

### 2.3 Corridor and Regional Topographic Setting

Based on a review of the United States Geological Survey (USGS.) 7.5-Minute Quadrangle Map, The Narrows, NY, dated 1982, the elevation of the three (3) Corridor areas range from approximately 15 feet above mean sea level (MSL) to approximately 60 feet above MSL. The topography of the immediate Corridor areas is generally characterized by sloping downward from northwest to southeast. A copy of the topographic map is presented in Figure 1.

### 2.4 Corridor and Regional Geology

Staten Island is underlain by metamorphic, igneous, and sedimentary bedrock. Ordovician Serpentinite, a metamorphosed portion of ocean crust, is found beneath the eastern and central portions of Staten Island. This rock also contains asbestos and can be hazardous if crushed into a fine powder. West of the serpentenite formation, Staten Island is underlain by Mesozoic igneous and sedimentary rocks. A Triassic diabase intrusion, known as the Palisades Sill, intruded the older Triassic sedimentary rocks of the Brunswick Formation which consists of sandstone, siltstone, mudstone, and arkose. Sediments overlay bedrock over much of Staten Island. The eastern portion of the island is overlain by Cretaceous sediments of the Raritan Formation which consists of stream and coalescing delta deposits. The formation consists of a fining upward sequence representing a prograding shoreline. The formation has been divided into two (2) units, a lower sand aquifer and a conformable overlying clay unit (the Raritan Confining Unit).

Pleistocene glacial and glaciofluvial sediments as well as recent river, alluvium, and salt marsh deposits overly the bedrock and the Cretaceous Sediments. These sediments consist of glacial till and moraine. A terminal moraine known as the "Harbor Hill Moraine" stretches from Staten Island, through Brooklyn and Queens, and out across Long Island to the tip of Montauk Point. The southern edges of the moraine are marked by hills and elevated areas. In Staten Island, Todt Hill, at 409 feet, the highest point on the Atlantic seaboard south of Maine, is composed of glacial terminal moraine.

The subsurface soils encountered during this Phase II SCI consisted predominantly of brown to black fine to medium sand with some gravel and occasional clay layers from grade to 6 ftbg . Man-made materials (i.e., brick, gravel, etc.), which are indicative of urban fill, were encountered in the area of Hylan Boulevard and Midland Avenue, Hylan Boulevard and Bedford Avenue, and Hylan Boulevard and Mallory Avenue at depths ranging from grade to 6 ftbg. Bedrock was not encountered during the Phase II SCI.

### 2.5 Corridor and Regional Hydrogeology

Groundwater is typically present within the unconsolidated sediments and generally occurs from 5 to 20 ft bgs in coastal areas. In areas of greater elevation under the glacial moraine deposits, groundwater may be encountered at greater depths. Based on the findings of the Phase II SCI, groundwater was not encountered within the nine (9) soil borings to a depth of 6 ftbg ; however, what appeared to be perched groundwater was noted within SB-03 and SB-09. Groundwater also occurs in bedrock within secondary permeability zones such as fractures, faults, and foliation planes. In general, regional groundwater flow direction is controlled by regional topography with groundwater flow from higher to lower elevations. Along the shorelines, groundwater elevations and flow can be tidally influenced, resulting in groundwater elevation fluctuations and deflections in flow direction.

Department of Design and Construction

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

### 3.0 CORRIDOR EVALUATION

Proposed construction activities at the three (3) Corridor areas include soil excavation and may include dewatering, which in-turn requires that soils and groundwater at the Corridor areas be characterized to identify material handling requirements (i.e., use of protective equipment) and for material reuse, handling, and/or waste disposal requirements. LiRo provided oversight for the advancement of nine (9) soil borings and the collection of soil samples during the field investigation at the designated areas in the vicinity of the planned construction. Since groundwater was not anticipated to be encountered, no groundwater samples were proposed to be collected in the work plan.

The soil samples from the borings were transferred into laboratory supplied sample jars and properly labeled. The samples were stored with ice in a cooler to preserve the samples at $4^{\circ}$ Celsius prior to and during shipment. A chain-of-custody was prepared prior to sample shipment. A summary of the field observations, including the location of the sites and the details of the soil borings, is provided in Table 1.

### 3.1 Soil Quality Investigation

Three (3) borings were advanced within each Corridor area for a total of nine (9) borings (SB-01 through SB-09) to the terminal depths of 6 ftbg , or refusal, whichever was encountered first. The borings were cleared to a depth of 6 ftbg using a hand auger 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 1. Maps depicting each boring location are included in Appendix A. Boring logs are provided in Appendix B. The locations of each boring are described below:

## Corridor Area 1:

- SB-01 - Advanced on Hylan Boulevard, 26 feet northeast of Midland Avenue and 11 feet southeast of Hylan Boulevard.
- SB-02 - Advanced on Hylan Boulevard, 101 feet northeast of Midland Avenue and 11 feet southeast of Hylan Boulevard.
- SB-03 - Advanced on Hylan Boulevard, 59 southwest of Bedford Avenue and 10 feet southeast of Hylan Boulevard.


## Corridor Area 2:

- SB-04 - Advanced on Hylan Boulevard, 76 feet northeast of Liberty Avenue and 7 feet northwest of Hylan Boulevard.
- SB-05 - Advanced on Hylan Boulevard, 100 feet southwest of Seaview Avenue and 7 feet northwest of Hylan Boulevard.
- SB-06 - Advanced on Hylan Boulevard, 39 feet southwest of Seaview Avenue and 7 feet northwest of Hylan Boulevard.


## Corridor Area 3:

- SB-07 - Advanced on Hylan Boulevard, 140 feet east of Clove Road and 1 foot north of Hylan Boulevard.
- SB-08 - Advanced on Hylan Boulevard, 72 feet east of SB-07 and 1 foot north of Hylan Boulevard.
- SB-09 - Advanced on Hylan Boulevard, 66 feet east of SB-08 and 1 foot north of Hylan Boulevard.

Soil from each boring was classified and examined for visual evidence (i.e., staining, discoloration) and any olfactory indications (i.e., odors) of contamination. In addition, a PID was used to screen the soil for VOC vapors.

In order to identify representative conditions relative to the presence of PAHs, PCBs, TPHC DRO/GRO, RCRA Characteristics, and TCLP RCRA metals over the entire soil column in each boring, composite soil samples were collected by mixing the soil from the entire column in a stainless steel bowl. Boring composite samples were collected from the borings (SB-01 through SB-09).

In order to identify representative conditions relative to the presence of VOCs, grab soil samples were collected from the 6 -inch interval where the highest PID reading was recorded or from the bottom 6 -inch interval in the borings.

### 3.2 Groundwater Quality Investigation

Since groundwater was not anticipated to be encountered prior to initiating the Phase II SCI field activities, no groundwater sampling was proposed within the Phase II SCI work plan. The water table groundwater was encountered during the field activities.

### 3.3 Laboratory Analyses

The soil samples were submitted to Con-Test, a NYS Department of Health (NYSDOH) approved laboratory (No. 10899). Field derived Quality Assurance/Quality Control (QA/QC) samples (i.e., field blank, trip blank, duplicate) were not collected for this project. Laboratory analytical reports are included in Appendix C.

The grab soil samples were analyzed for USEPA Target Compound List (TCL) volatile organic compounds (VOCs) by Method 8260. The boring composite soil samples were analyzed for: PAHs via USEPA Method 8270 C ; (2) PCBs via USEPA Method 3550B/8082; (3) TPHC DRO/GRO via USEPA Method 8015B; (4) RCRA Characteristics via USEPA SW-846; and, (5) TCLP RCRA Metals via USEPA SW-846.

### 3.4 Data Evaluation

In order to evaluate the subsurface soil quality, laboratory analytical results were compared with the regulatory standards identified in (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Unrestricted and Restricted Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); (2) NYSDEC CP-51 Soil Cleanup Levels (SCLs) which include Supplemental Soil Cleanup Objectives (SSCOs) to NYSDEC Subpart 375-6 and SCLs for gasoline/fuel oil contaminated soil; and/or (3) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and 6 New York City Code for Rules and Regulation (NYCRR) Part 371.

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

This section discusses the analytical data and findings for the activities discussed in Section 3.0. Boring logs can be found in Appendix B. Complete analytical data reports are included in Appendix C.

### 4.1 Field Screening

Field screening within Corridor Area 1, including PID readings and visual and olfactory observations, identified PID readings ranging from 0.5 parts per million ( ppm ) to 155 ppm within borings SB- 01 , SB02 , and SB-03. In addition, two (2) of the borings, SB-01 and SB-02, had petroleum odors detected based on olfactory observations. These two (2) borings are located adjacent to an existing Mobil station. Refer to Table 1 for a summary of environmental boring data.

Field screening (i.e., PID readings and visual and olfactory observations) did not identify any petroleumimpacted soils within Corridor Areas 2 or 3.

### 4.2 Soil Laboratory Analytical Results

### 4.2.1 Volatile Organic Compounds (VOCs) in Soil

## Corridor Area 1:

VOCs were detected in all three (3) of the grab samples collected from Corridor Area 1. 1,2,4Trimethylbenzene, ethylbenzene, n-propylbenzene, and $m \& p$ xylene, were detected at concentrations exceeding Unrestricted Use (Track 1) SCOs and CP-51 SCLs in SB-02. The presence of elevated concentrations of these compounds (petroleum components) in the subsurface soils in the Hylan Boulevard and Midland Avenue Corridor area is most likely associated with the adjacent Mobil Gas Station.

Acetone was also detected at a concentration above the Unrestricted Use (Track 1) SCO in sample SB-03. Acetone is a common laboratory cross contaminant and is most likely not representative of subsurface conditions.

## Corridor Area 2:

VOCs were not detected in the three (3) grab samples collected from Corridor Area 2.

## Corridor Area 3:

One (1) VOC, acetone, was detected in one (1) of the three (3) grab samples collected from Corridor Area 3. As indicated above, acetone is a common laboratory cross contaminant and is most likely not representative of subsurface conditions. Refer to Table 2 for a summary of TCL VOC detections.

### 4.2.2 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil

## Corridor Area 1:

SVOCs were detected in all three (3) composite samples collected from Corridor Area 1. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and/or 2-methylnaphthalene were detected at concentrations exceeding their corresponding Unrestricted Use (Track 1) SCOs, Restricted Use (Track 2) SCOs, and/or CP-51 SCLs in the composite samples collected from SB-01 and SB-02. The detected PAHs may be due to: (a) residuals from releases of petroleum products along the Corridor areas; and/or, (b) indicative of the presence of historic fill material placed at the Corridor areas. The remaining SVOCs were detected below applicable standards.

Department of Design and

New York City Department of Design and Construction
Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## Corridor Area 2:

SVOCs were not detected in the three (3) composite samples collected from Corridor Area 2.

## Corridor Area 3:

SVOCs were detected in one (1) of the three (3) composite samples collected from Corridor Area 3. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were detected at concentrations exceeding their corresponding Unrestricted Use (Track 1) SCOs, Restricted Use (Track 2) SCOs, and CP-51 SCLs in one (1) of the composite samples collected including SB-09. The detected PAHs may be due to: (a) residuals from releases of petroleum products along the Corridor areas; and/or, (b) indicative of the presence of historic fill material placed at the Corridor areas. The remaining SVOCs were detected below applicable standards. Refer to Table 3 for a summary of PAHs detections.

### 4.2.3 Polychlorinated Biphenyls (PCBs) in Soil

PCBs were not detected in any of the nine (9) composite samples collected from Corridor Areas 1, 2, and 3. Refer to Table 4 for the PCB results.

### 4.2.4 Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) Metals in Soil

## Corridor Area 1:

TCLP RCRA metals were detected in all three (3) composite samples collected from Corridor Area 1. Barium and/or lead were detected at concentrations below their corresponding RCRA limits in SB-01, SB-02, and/or SB-03.

## Corridor Area 2:

TCLP RCRA metals were detected in all three (3) composite samples collected from Corridor Area 2. Barium and/or lead were detected at concentrations below their corresponding RCRA limits in SB-04, SB-05, and/or SB-06.

## Corridor Area 3:

TCLP RCRA metals were detected in all three (3) composite samples collected from Corridor Area 3. Barium and/or lead were detected at concentrations below their corresponding RCRA limits in SB-07, SB-08, and/or SB-09. Refer to Table 5 for a summary of TCLP RCRA metals detections.

### 4.2.5 Waste Characterization of Soil

## Corridor Area 1:

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity ( pH ) were within the acceptable RCRA ranges. TPHC-DRO were detected at concentrations ranging from $33 \mathrm{mg} / \mathrm{kg}$ to $250 \mathrm{mg} / \mathrm{kg}$ in all three (3) samples collected from Corridor Area 1. The highest concentrations, $170 \mathrm{mg} / \mathrm{kg}$ and $250 \mathrm{mg} / \mathrm{kg}$, were detected in the area of the Mobil Gas Station. TPHC-GRO were detected in samples SB-01 and SB02 at concentrations of $5 \mathrm{mg} / \mathrm{kg}$ and $810 \mathrm{mg} / \mathrm{kg}$, respectively. There are no regulatory standards for TPHC-DRO and TPHC-GRO.

Department of Design and

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Construction Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## Corridor Area 2:

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity ( pH ) were within the acceptable RCRA ranges. TPHC-DRO were detected at concentrations ranging from $12 \mathrm{mg} / \mathrm{kg}$ to $17 \mathrm{mg} / \mathrm{kg}$ in all three (3) samples collected from Corridor Area 2. There is no regulatory standard for TPHC-DRO.

## Corridor Area 3:

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity ( pH ) were within the acceptable RCRA ranges. TPHC-DRO were detected at concentrations ranging from $13 \mathrm{mg} / \mathrm{kg}$ to $30 \mathrm{mg} / \mathrm{kg}$ in all three (3) samples collected from Corridor Area 3. There is no regulatory standard for TPHC-DRO. 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 5 for a summary of RCRA Characteristics and TPHC-DRO/GRO results.

### 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on 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 within Corridor Area 1, including PID readings and visual and olfactory observations, identified PID readings ranging from 0.5 ppm to 155 ppm within borings SB-01, SB-02, and SB-03. In addition, two (2) of the borings, SB-01 and SB-02, had petroleum odors detected based on olfactory observations. These two (2) borings are located adjacent to an existing Mobil station located at 2150 Hylan Boulevard. A historical NYSDEC spill (No. 1010519) was identified for Exxon/Mobil located at 2150 Hylan Boulevard in the NYSDEC Spills database. Field screening (i.e., PID readings and visual and olfactory observations) did not identify any petroleum-impacted soils within Corridor Areas 2 or 3;
- Laboratory analytical results identified petroleum-impacted soils in Corridor Areas 1 and 3. Elevated concentrations of petroleum components (VOCs, PAHs, and/or TPHC-DRO/GRO) were present in subsurface soils in the Corridor areas located at Hylan Boulevard and Midland Avenue and Hylan Boulevard and Mallory Avenue. The presence of elevated concentrations of petroleum components in subsurface soils in the Corridor areas may be attributed to: (a) residuals from releases of petroleum products from nearby sites; and/or, (b) contaminants in historic fill material placed on the Corridor areas;
- The subsurface soil sampled did not exhibit hazardous waste characteristics;

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, petroleum-contaminated soil in Corridor Areas 1 and 3 and of non-hazardous contaminated soil in Corridor Area 2. The Contractor should be required to submit a Material Handling Plan, to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Due to the presence of VOCs and PAHs in soil at the investigated sites, dust control procedures are recommended during excavation activities 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 proposed for all three (3) Corridor areas. A Community Air Monitoring Plan (CAMP) is recommended to be developed for Corridor Areas 1 and 3 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. Specific requirements shall be reviewed for each situation in consultation with NYSDOH to ensure proper applicability;

New York City Department of Design and Construction
Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

- While groundwater was not encountered during the Phase II SCI field activities, dewatering may be necessary during construction activities in the Corridor areas. If encountered, groundwater samples should be collected and analyzed for NYCDEP Sewer Discharge Limitations. Depending on those results, groundwater may require pre-treatment prior to discharge;
- In addition, should dewatering be necessary during construction activities within the Corridor areas, the contractor should be required to obtain NYCDEP sewer discharge permit. Lastly, if discharge into storm sewers (which ultimately discharge to surface water) is required during such 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 shall 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 VOCs and PAHs).


### 6.0 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.

Report Prepared By:


Amy Hewson
Senior Environmental Analyst

Report Reviewed By:


Stephen Frank
Senior Geologist

Report Reviewed By:


[^14]
## STATEMENT OF LIMITATIONS

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 Corridor 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 Corridor.

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 Corridor, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Corridor, 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 Corridor 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 Corridor.

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 Corridor 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 Corridor 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.

TABLES

TABLE 1 - SUMMARY OF FIELD INVESTIGATION
TABLE 2 - SUMMARY OF TCL VOCs DETECTED IN SOIL
TABLE 3 - SUMMARY OF PAHs DETECTED IN SOIL
TABLE 4 - SUMMARY OF PCBs DETECTED IN SOIL
TABLE 5-SUMMARY OF WASTE CHARACTERISTICS DETECTED IN SOIL
国

New York City Department of Design and Construction | Phase II Subsurface Corridor Investigation Report |
| :--- |
| Hylan Blvd. Bus Pads For SBS, Hylan Blvd. - Staten Island, NY |

| Table 1. Summary of Environmental Boring Data Phase II Subsurface Corridor Investigation for the Hylan Blvd. Bus Pads for SBS Hylan Blvd., Staten Island, New York |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boring No. | Sample ID | $\begin{aligned} & \text { PID } \\ & (\mathrm{ppm}) \end{aligned}$ | Sample Interval (ftbg) | Total vocs (ug/kg) | Total PAHs (ug/kg) | Total PCBs (ug/kg) | Depth to Water (ftbg) | Total Depth (ftbg) | Other Comments |
| SB-01 | SB-01-3.5-4 | <1 | 3.5-4 | 2 | NA | NA | NA | 6.0 | Greatest PID reading $=2.4 \mathrm{ppm}$ at 3.5 ftbg . Slight petroleumodor. |
|  | SB-01-COMP |  | Composite | NA | 49,300 | ND |  |  |  |
| SB-02 | SB-02-2-2.5 | $<1$ | 2-2.5 | 46,050 | NA 22 | NA | NA | 6.0 | odor. <br> Greatest PID reading $=\mathbf{1 5 5} \mathbf{~ p p m}$ at 2 ftbg . Slight petroleum |
| SB-03 | SB-02-COMP | <1 | Composie | 383 | NA | NA | NA | 6.0 | Greatest PID reading $=0.5 \mathrm{ppm}$ at $5.5-6$ ftbg. No visual or olfactory evidence of impacts. |
|  | SB-03-COMP |  | Composite | NA | 2,460 | ND |  |  |  |
| SB-04 | SB-04-5.5-6 | $<1$ | 5.5-6 | ND | NA | NA | NA | 6.0 | No petroleum odors, visual evidence or impact, or elevated PID readings were detected. |
|  | SB-04-COMP |  | Composite | NA | ND | ND |  |  |  |
| SB-05 | SB-05-5.5-6 | <1 | 5.5-6 | ND | NA | NA | NA | 6.0 | No petroleum odors, visual evidence or impact, or elevatedPID readings were detected. |
|  | SB-05-COMP |  | Composite | NA | ND | ND |  |  |  |
| SB-06 | SB-06-5.5-6 | <1 | 5.5-6 | ND | NA | NA | NA | 6.0 | No petroleum odors, visual evidence or impact, or elevatedPID readings were detected. |
|  | SB-06-COMP |  | Composite | NA | ND | ND |  |  |  |
| SB-07 | SB-07-5.5-6 | <1 | 5.5-6 | ND | NA | NA | NA | 6.0 | No petroleum odors, visual evidence or impact, or elevatedPID readings were detected. |
|  | SB-07-COMP |  | Composite | NA | ND | ND |  |  |  |
| SB-08 | SB-08-5.5-6 | <1 | 5.5-6 | 120 | NA | NA | NA | 6.0 | No petroleum odors, visual evidence or impact, or elevatedPID readings were detected. |
|  | SB-08-COMP |  | Composite | NA | ND | ND |  |  |  |
| SB-09 | SB-09-5.5-6 | <1 | 5.5-6 | ND | NA | NA | NA | 6.0 | No petroleum odors, visual evidence or impact, or elevaledPID readings were detected. |
|  | SB-09-COMP |  | Composite | NA | 20,740 | ND |  |  |  |

Notes:
All composite soil samples were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), Target Compound Liust (TCL) Polychlorinated Biphenyls (PCBs), Total Petroleum All composite soil samples were analyzed for Polycyclic Aromatic Hydrocarbons (PAHS), TO
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
$\mathrm{ND}=$ Non detect
$\mathrm{ftbg}=$ feet below
$\mathrm{ftbg}=$ feet below grade surface
$\mathrm{ppm}=$ parts per million (or $\mathrm{mg} / \mathrm{kg}$ )
ug/kg $=$ microgram per kilogram
SB-01 through SB-03-Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09-Corridor Area 3.

[^15]Department of
Design and
Construction

New York City Department of Design and Construction | Hylan Blvd. Bus Pads For SBS, Hylan Blvd. - Staten Island, NY |
| :--- |

Table 2. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil Corridor Investigation for the Hylan Blvd. Bus Pads for SBS
Hylan Blvd., Staten Island, New York

| TCL VOC | Part 375-6.8 (a)Unrestricted Use(Track 1)Soil CleanupObjectives (SCOs) | Part 375-6.8 (b) Restricted Use (Track <br> 2) Residential Soil Cleanup Objectives (SCOs) | CP-51 Soil Cleanup Levels (SCLs) | Sample ID, Date Collected, and Depth (ft bgs) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | SB-01-3.5-4 | SB-02-2-2.5 | SB-03-5.5-6 | SB-04-5.5-6 | SB-05-5.5-6 |
|  |  |  |  | 11/18/2015 | 11/18/2015 | 11/18/2015 | 11/24/2015 | 11/24/2015 |
| 1,2,4-Trimethylbenzene |  |  |  | 3.5-4 | 2-2.5 | 5.5-6 | 5.5-6 | 5.5-6 |
| 1,3,5-Trimethylbenzene | 8,400 | 47,000 | 3,600 | ND |  | ND | ND | ND |
| Acetone | 50 | 100,000 | 8,400 | 2.3 | 4,300 | 3.1 | ND | ND |
| Ethylbenzene | 1,000 | 30,000 | 1.000 | ND | ND | ND | ND | ND |
| Isopropylbenzene | NS | NS | 1,000 | ND | 1300 | ND | ND | ND |
| Methylcyclohexane | NS | NS | NS | ND | 1,300 | ND | ND | ND |
| Naphthalene | NS | NS | 12,000 | ND | 5,500 | ND | ND | ND |
| n-Butylbenzene | 12,000 | NS | 12,000 | ND | 7,600 | ND | ND | ND |
| n-Propylbenzene | 3,900 | 100,000 | 3,900 | ND | 2,400 | ND | ND | ND |
| sec-Butylbenzene | 11,000 | 100,000 | 11,000 | ND | 750 | ND | ND | ND |
| Xylene (Mixed) | 260 | 100,000 | 260 | ND | 750 | ND | ND | ND |
| Total VOCs | NS | NS | NS | 2 | 188 46 | ND | ND | ND |
|  |  |  |  | 2 | 46,050 | 383 | ND | ND |

[^16]SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)
CP-51 Soil Cleanup Levels (SCLs) = New York State Department of Environmental Conservation (NYSDEC) CP-51 - Soil Cleanup Guidance (CP-51) (October 21, 2010) SB-01 through SB-03 - Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09 - Corridor Area. 3 .
BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - SCLs for Gasoline Contaminated Soils, Table 3 - SCLs for Fuel oil Contaminated Soil
Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives
LiRo Engineers, Inc.
DDC CAPIS ID No.: HWR100PAD
Department of
Design and
Construction
New York City Department of Design and

Notes:
Notes:
ft bgs $=$ feet below grade surface
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
ND $=$ Compound not detected above mer the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14,
SCOs $=$ Soil Cleanup Objectives as per the CP-51 Soil Cleanup Levels (SCLs) = New York State Department of Environmental Conservation (NYSDEC) CP-51 - Soil Cleanup Guidance (CP-51) (October 21, 2010).
SB-01 through SB-03 - Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09 - Corridor Area 3.
BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - SCLs for Gasoline Contaminated Soils, Table 3-SCLs for Fuel oil Contaminated Soil
Italicized $=$ Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives

[^17]Department of
Design and
Construction
Table 3. Summary of Polycyclic Aromatic Hydrocarbons (PAHs) Detected in Soil Phase II Subsurface Corridor Investigation for the Hylan Blvd. Bus Pads for SBS Hylan Blvd., Staten Island, New York

| TCL SVOC | Part 375-6.8 (a)Unrestricted Use(Track 1)Soil CleanupObjectives (SCOs) | Part 375-6.8 (b) Restricted Use (Track <br> 2) Residential Soil Cleanup Objectives (SCOs) | CP-51 Soil Cleanup Levels (SCLs) | Sample ID, Date Collected, and Depth (ft bgs) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | SB-01-COMP | SB-02-COMP | SB-03-COMP | SB-04-COMP | SB-05-COMP |
|  |  |  |  | 11/18/2015 | 11/18/2015 | 11/18/2015 | 11/24/2015 | 11/24/2015 |
|  |  |  |  | Composite | Composite | Composite | Composite | Composite |
| 2-Methylnaphthalene | NS | NS | 410 | ND | 9,600 | ND | ND | ND |
| Acenaphthene | 20,000 | 100,000 | 20,000 | 1,300 | ND | ND | ND | ND |
| Anthracene <br> Benzo(a)anthracene | 100,000 | 100,000 | 100,000 | 780 | ND | ND | ND | ND |
| Benzo(a)anthracene | 1,000 | 1,000 | 1,000 | 䞨綏 | 470 | 240 | ND | ND |
| Benzo(a)pyrene | 1,000 | 1,000 | 1,000 | W\% | 620 | 320 | ND | ND |
| Benzo(b)fluoranthene | 1,000 | 1,000 | 1,000 |  | 960 | 490 | ND | ND |
| Benzo(g,h,i)perylene | 100,000 | 100,000 | 100,000 | 3,800 | 490 | 220 | ND | ND |
| Benzo(k)fluoranthene | 800 | 1,000 | 800 | 3,800 | 310 | ND | ND | ND |
| Chrysene | 1,000 | 1,000 | 1,000 |  | 530 | 290 | ND | ND |
| Dibenz[a,h]anthracene | 330 | 330 | 330 |  | ND |  | ND | ND |
| Flouranthene | 100,000 | 100,000 | 100,000 | 5,900 | 660 | ND | ND | ND |
| Fluorene | 30,000 | 100,000 | 30,000 | ND | ND | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | 500 | 500 | 30,000 500 | ND | Nax. | ND | ND | ND |
| Napthalene | 12,000 | 100,000 | 12,000 | ND | (2) 7.500 | 220 | ND | ND |
| Phenanthrene | 100,000 | 100,000 | 100,000 | 2,400 | $\frac{7,500}{400}$ | ND | ND | ND |
| Pyrene | 100,000 | 100,000 | 100,000 | 6,400 | 400 | ND | ND | ND |
| Total PAHs | NS | NS | NS | 49,300 | 22 | 350 | ND | ND |

Notes:
All concentrations are reported in parts per billion (ppb or ug/kg)
ft bgs = feet below grade surface
ND $=$ Compound not detected above method detection limit (see attached lab report for mdl's)
NS $=$ No Standard
PAHs = Polycyclic Aromatic Hydrocarbons
SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)
CP-51 Soil Cleanup Levels (SCLs) = New York State Department of Environmental Conservation (NYSDEC) CP-51 - Soil Cleanup Guidance (CP-51) (October 21, SB-01 through SB-03 - Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09 - Corridor Area 3
BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - SCLs for Gasoline Contaminated Soils, Table 3 - SCLs for Fuel oil Contaminated Soil Italicized $=$ Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives
LiRo Engineers, Inc.
Department of
Design and
Construction
Table 3. Summary of Polycyclic Aromatic Hydrocarbons (PAHs) Detected in Soil
New York City Department of Design and Construction $\begin{array}{r}\text { Phase II Subsurface Corridor Investigation Report } \\ \text { Hylan Blvd. Bus Pads For SBS, Hylan Blvd. - Staten Island, NY } \\ \hline\end{array}$
Hylan Blvd., Staten Island, New York

| TCL SVOC | Part 375-6.8 (a)Unrestricted Use(Track 1)Soil CleanupObjectives (SCOs) | Part 375-6.8 (b) Restricted Use (Track <br> 2) Residential Soil Cleanup Objectives (SCOs) | CP-51 Soil Cleanup Levels (SCLs) | Sample ID, Date Collected, and Depth (ft bgs) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | SB-06-COMP | SB-07-COMP | SB-08-COMP | SB-09-COMP |
|  |  |  |  | 11/24/2015 | 11/23/2015 | 11/23/2015 | 11/24/2015 |
|  |  |  |  | Composite | Composite | Composite | Composite |
| 2-Methylnaphthalene | NS | NS | 410 | ND | ND | ND | ND |
| Acenaphthene | 20,000 | 100,000 | 20,000 | ND | ND | ND | 250 |
| Anthracene | 100,000 | 100,000 | 100,000 | ND | ND | ND | 1,000 |
| Benzo(a)anthracene | 1,000 | 1,000 | 1,000 | ND | ND | ND | \%taswa |
| Benzo(a)pyrene | 1,000 | 1,000 | 1,000 | ND | ND | ND |  |
| Benzo(b)fluoranthene | 1,000 | 1,000 | 1,000 | ND | ND | ND | 4 4 , 610 |
| Benzo(g, h, i) perylene | 100,000 | 100,000 | 100,000 | ND | NN | NN | 610 |
| Benzo(k)fluoranthene | 800 | 1,000 | 800 | ND | ND | ND | 700 |
| Chrysene | 1,000 | 1,000 | 1,000 | ND | ND | ND | 24) |
| Dibenz[a,h]anthracene | 330 | 330 | 330 | ND | ND | ND | 230 |
| Flouranthene | 100,000 | 100,000 | 100,000 | ND | ND | ND | 3,700 |
| Fluorene | 30,000 | 100,000 | 30,000 | ND | ND | ND | 860 |
| Indeno(1,2,3-cd)pyrene | 500 | 500 | 500 | ND | DD | DD | \% |
| Napthalene | 12,000 | 100,000 | 12,000 | ND | ND | ND | ND |
| Phenanthrene | 100,000 | 100,000 | 100,000 | ND | ND | ND | 3,800 |
| Pyrene | 100,000 | 100,000 | 100,000 | ND | ND | ND | 3,000 |
| Total PAHs | NS | NS | NS | ND | ND | ND | 20,740 |

Notes:
All concentrations are reported in parts per billion (ppb or ug/kg)
ft bgs = feet below grade surface
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
NS = No Standard
PAHs = Polycyclic Aromatic Hydrocarbons
SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, CP-51 Soil Cleanup Levels (SCLs) = New York State Department of Environmental Conservation (NYSDEC) CP-51 Area 3.
BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - SCLs for Gasoline Contaminated Soils, Table 3-SCLs for Fuel oil Contaminated Soil
Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives
New York City Department of Design and Construction $\begin{array}{r}\text { Phase II Subsurface Corridor Investigation Report } \\ \text { Hylan Blvd. Bus Pads For SBS, Hylan Blvd. - Staten Island, NY } \\ \hline\end{array}$

Phase II Subsurface Corridor Investigation for the Hylan Blvd. Bus Pads for SBS Hylan Blvd., Staten Island, New York

| Table 4. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil Phase II Subsurface Corridor Investigation for the Hylan Blvd. Bus Pads for SBS Hylan Blvd., Staten Island, New York |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PCBs | Part 375-6.8 (a)Unrestricted Use(Track 1)Soil CleanupObjectives (SCOs) | Part 375-6.8 (b) Restricted Use (Track <br> 2) Residential Soil Cleanup Objectives (SCOs) | CP-51 Soil Cleanup Levels (SCLs) | Sample ID, Date Collected, and Depth (ftbg) |  |  |  |  |
|  |  |  |  | SB-01-COMP | SB-02-COMP | SB-03-COMP | SB-04-COMP | SB-05-COMP |
|  |  |  |  | 11/18/2015 | 11/18/2015 | 11/18/2015 | 11/24/2015 | 11/24/2015 |
|  |  |  |  | Composite | Composite | Composite | Composite | Composite |
| Total PCBs | 100 | 1,000 | NS | ND | ND | ND | ND | ND |

SB-01 through SB-03 - Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09 - Corridor Area 3.
BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - SCLs for Gasoline
Contaminated Soils, Table 3 - SCLs for Fuel oil Contaminated Soil
Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives
All concentrations are reported in parts per billion (ppb or ug/kg)
$\mathrm{ftbg}=$ feet below grade surface
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
NS = No Standard
CP-51 Soil Cleanup Levels (SCLs) = New York State Department of Environmental Conservation (NYSDEC) CP-51 - Soil Cleanup Guidance (CP-51) (October 21, 2010).
Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives
LiRo Engineers, Inc.
DDC CAPIS ID No.: HWR100PAD

Table 4. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil
Phase II Subsurface Corridor Investigation for the Hylan Blvd. Bus Pads for SBS Hylan Blvd., Staten Island, New York

| PCBs | Part 375-6.8 (a)Unrestricted Use(Track 1)Soil CleanupObjectives (SCOs) | Part 375-6.8 (b) Restricted Use (Track <br> 2) Residential Soil Cleanup Objectives (SCOs) | CP-51 Soil Cleanup Levels (SCLs) | Sample ID, Date Collected, and Depth (ftbg) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | SB-06-COMP | SB-07-COMP | SB-08-COMP | SB-09-COMP |
|  |  |  |  | 11/24/2015 | 11/23/2015 | 11/23/2015 | 11/24/2015 |
|  |  |  |  | Composite | Composite | Composite | Composite |
| Total PCBs | 100 | 1,000 | NS | ND | ND | ND | ND |

Notes:
All concentrations are reported in parts per billion (ppb or ug/kg) $\mathrm{ftbg}=$ 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 CP-51 Soil Cleanup Levels (SCLs) = New York State Department of Environmental Conservation (NYSDEC) CP-51 - Soil Cleanup Guidance (CP51) (October 21, 2010).

$$
\text { SB-01 through SB-03 - Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09 - Corridor Area } 3 .
$$

BOLD = Concentration exceeds NYSDEC CP-51 SCLs Table 1 - Supplemental Soil Cleanup Objectives (Residential), Table 2 - SCLs for Gasoline Contaminated Soils, Table 3 - SCLs for Fuel oil Contaminated Soil
Italicized = Concentration exceeds Restricted Use (Track 2) Residential Soil Cleanup Objectives
DDC CAPIS ID No.: HWR100PAD
$\rightarrow-$ Department of
New York City Department of Design and Construction Hylan Blvd. Bus Pads For SBS, Hylan Blvd. - Staten Island, NY $\begin{aligned} & \text { Table 5. Summary of Waste Characterization in Soil } \\ & \text { Phase II Subsurface Corridor Investigation for the Hylan Blvd. Bus Pads for SBS }\end{aligned}$ Hylan Blvd., Staten Island, New York

| Parameter | 6 NYCRR Part 371 and RCRA | Sample ID, Date Collected, and Depth (ftbg) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SB-01-COMP | SB-02-COMP | SB-03-COMP | SB-04-COMP | SB-05-COMP | SB-06-COMP | SB-07-COMP | SB-08-COMP | SB-09-COMP |
|  |  | 11/18/2015 | 11/18/2015 | 11/18/2015 | 11/24/2015 | 11/24/2015 | 11/24/2015 | 11/23/2015 | 11/23/2015 | 11/24/2015 |
|  |  | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite |
| METALs ${ }^{1}$ | ug/L |  |  |  |  |  |  |  |  |  |
| Barium | 100,000 | 1,010 | 1,210 | 440 | 270 | 370 | 240 | 300 |  |  |
| Lead | 5,000 | 660 | 1,010 | ND | 300 | ND | ND | ND | ND | $\frac{1,010}{320}$ |
| MISC. PARAMETERS (units) |  |  |  |  |  |  |  |  |  |  |
| Reactivity Sulfide (mg/kg) | 500 | ND | ND | ND | ND | ND | ND | ND | ND |  |
| Reactivity Cyanide (mg/kg) | 250 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| pH (SU) | 2-12.5 | 12 | 8.6 | 11 | 8.5 | 7.7 | 8.1 | 9 | ${ }^{\text {ND }}$ | ND |
| Ignitability | $>140{ }^{\circ} \mathrm{F}$ | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent |
| TPHC Diesel Range Organics (mg/kg) | NS | 170 | 250 | 33 | 17 | 12 | 13 | 13 | 17 | 33 |
| TPHC Gasoiline Range Organics (mg/kg) | NS | 5 | 810 | ND | ND | ND | ND | ND | ND | ND |

[^18]
## Department of

Design and Construction

New York City Department of Design and Construction
Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

FIGURE 1 - TOPOGRAPHIC CORRIDOR LOCATION MAP


New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

FIGURE 2 - SAMPLE LOCATION PLAN
J:115-008-0265 2015 DDC BEGSIProjects|Phase I - Phase II10779 Hylan Blyd Bus Pads Ph II SCICADIHylan Boring Map.dwa, 12/14/2015 11:59:09 AM, AMK


J:115-008-0265 2015 DDC BEGSIProjectsIPhase I-Phase IIM10779 Hylan Blvd Bus Pads Ph II SCICADIHylan Boring Map.dwa, 12/14/2015 11:59:28 AM AMK


Department of Design and Construction

New York City Department of Design and Construction
Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## APPENDIX A

## BORING LOCATION SKETCHES



J:115-008-0265 2015 DDC BEGSIProjectsIPhase I - Phase In10779 Hylan Blvd Bus Pads Ph II SCMCADIHylan Boring Sketch,dwg, 12/14/2015 12:00:13 PM, AMK


Department of Design and Construction

New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## APPENDIX B

## GEOLOGIC BORING LOGS











New York City Department of Design and Construction Phase II Subsurface Corridor Investigation Report Hylan Blvd. Bus Pads for SBS - Staten Island, NY

## APPENDIX C

## LABORATORY ANALYTICAL RESULTS

Included on Attached CD

December 8, 2015

Amy Hewson<br>LiRo Engineers, Inc.<br>690 Delaware Avenue<br>Buffalo, NY 14209-2202

Project Location: Hylan Blvd. Staten Island, NY
Client Job Number:
Project Number: 15-008-0265/10779
Laboratory Work Order Number: 15K0903

Enclosed are results of analyses for samples received by the laboratory on November 19, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,


Aaron L. Benoit
Project Manager

## Table of Contents

Sample Summary ..... 4
Case Narrative ..... 6
Sample Results ..... 10
15K0903-01 ..... 10
15K0903-02 ..... 13
15K0903-03 ..... 20
15K0903-04 ..... 23
15K0903-05 ..... 30
15K0903-06 ..... 33
Sample Preparation Information ..... 40
QC Data ..... 43
Volatile Organic Compounds by GC/MS ..... 43
B136111 ..... 43
B136243 ..... 47
Semivolatile Organic Compounds by GC/MS ..... 53
B135920 ..... 53
Polychlorinated Biphenyls By GC/ECD ..... 55
B136022 ..... 55
Petroleum Hydrocarbons Analyses ..... 57
B135918 ..... 57
B136156 ..... 57
B136331 ..... 57
Metals Analyses (Total) ..... 58
B135926 ..... 58
58
B135929

## Table of Contents (continued)

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) ..... 59
B135950 ..... 59
B135994 ..... 59
B136146 ..... 59
TCLP - Metals Analyses ..... 60
B136998 ..... 60
Dual Column RPD Report ..... 61
Flag/Qualifier Summary ..... 65
Certifications ..... 66
Chain of Custody/Sample Receipt ..... 71

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
LiRo Engineers, Inc.
690 Delaware Avenue Buffalo, NY 14209-2202 PURCHASE ORDER NUMBER:

ATTN: Amy Hewson
PROJECT NUMBER: $15-008-0265 / 10779$

## ANALYTICAL SUMMARY

## WORK ORDER NUMBER: 15K0903

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.
PROJECT LOCATION: Hylan Blvd. Staten Island, NY

| FIELD SAMPLE \# | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SB-01-3.5-4ft | 15K0903-01 | Soil |  | SM 2540G |  |
|  |  |  |  | SW-846 8260C |  |
| SB-01-comp | 15K0903-02 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT <br> PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 7471B |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-8469014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |
| SB-02-2-2.5ft | 15K0903-03 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 8260C |  |
| SB-02-comp | 15K0903-04 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT PH-0618NY11301 |
|  |  |  |  | SW-846 6010C |  |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 7471B |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-846 9014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |
| SB-03-5.5-6ft | 15K0903-05 | Soil |  | SM 2540 G <br> SW-846 8260C |  |

39 Spruce Street * East L.ongmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, NY 14209-2202
ATTN: Amy Hewson

REPORT DATE: $12 / 8 / 2015$
PURCHASE ORDER NUMBER:

PROJECT NUMBER: $\quad 15-008-0265 / 10779$

## ANALYTICAL SUMMARY

$$
\text { WORK ORDER NUMBER: } \quad 15 \mathrm{~K} 0903
$$

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

| PROJECT LOCATION: | Hylan Blvd. Staten Island, NY |  |  |
| :--- | :--- | :--- | :--- |
| FIELD SAMPLE \# | LAB ID: | MATRIX | SAMPLE DESCRIPTION |

## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.
REVISED REPORT - TCLP RCRA 8 metals requested and reported.
For method 8270 , only PAHs were requested and reported.

## SW-846 6010C

Qualifications:
L-07
Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD
between the two LFB/LCS results is within method specified criteria.
Analyte \& Samples(s) Qualified:
Lead
B135926-BSDI

## SW-846 8015C

Qualifications:

## PR-03

Sample preserved in the laboratory, not in the field as required by the method.
Analyte \& Samples(s) Qualified:

15K0903-02[SB-01-comp]

## SW-846 8260C

## Qualifications:

## L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not
affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
Analyte \& Samples(s) Qualified:
2,2-Dichloropropane
B136243-BS 1, B136243-BSD1
tert-Butyl Alcohol (TBA)
B136243-BS1, B136243-BSD1

## L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this
compound is likely to be biased on the low side.
Analyte \& Samples(s) Qualified:
Dichlorodifluoromethane (Freon 1:
15K0903-03[SB-02-2-2.5ft], B136111-BLK1, B136111-BS1, B136111-BSD1

## L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD
between the two LFB/LCS results is within method specified criteria.
Analyte \& Samples(s) Qualified:
Bromochloromethane
B136243-BSD1
PR-03
Sample preserved in the laboratory, not in the field as required by the method.
Analyte \& Samples(s) Qualified:
$15 \mathrm{~K} 0903-01$ [SB-01-3.5-4ft], $15 \mathrm{~K} 0903-05[\mathrm{SB}-03-5.5-6 \mathrm{ft}]$
PR-15
According to the NY ELAP program, all voa results less than $0.2 \mathrm{mg} / \mathrm{Kg}$ are estimated and biased low if not collected according to SW-846
5035-L/5035A-L.
Analyte \& Samples(s) Qualified:

15K0903-01[SB-01-3.5-4ft], 15K0903-05[SB-03-5.5-6ft]
RL-11
Elevated reporting limit due to high concentration of target compounds.

## Analyte \& Samples(s) Qualified:

15K0903-03[SB-02-2-2.5ft]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is
associated with the reported value which is likely to be biased on the high side.
Analyte \& Samples(s) Qualified:
Acetone
B136243-BS1, B136243-BSD1
V-20
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
Analyte \& Samples(s) Qualified:

## 2,2-Dichloropropane

B136243-BS1, B136243-BSD1
2-Butanone (MEK)
B136243-BS1, B136243-BSD1
2-Hexanone (MBK)
B136243-BS1, B136243-BSD1 , )
4-Methyl-2-pentanone (MIBK)
B136243-BS1, B136243-BSD1

## Carbon Disulfide

B136243-BS1, B136243-BSD1
tert-Amyl Methyl Ether (TAME)
B136243-BS 1, B136243-BSD1
tert-Butyl Alcohol (TBA)
B136243-BS1, B136243-BSD1

## Z-01

Acetone is a common laboratory contaminant

## Analyte \& Samples(s) Qualified:

## Acetone

15K0903-05[SB-03-5.5-6ft]

## SW-846 8270D

Qualifications:

## V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
Analyte \& Samples(s) Qualified:
Pyrene
15K0903-02RE1[SB-01-comp]

## SW-846 9045C

## Qualifications:

H-03
Sample received after recommended holding time was exceeded.

## Analyte \& Samples(s) Qualified:

$\mathbf{p H}$
15K0903-02[SB-01-comp], 15K0903-04[SB-02-comp], 15K0903-06[SB-03-comp]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## SW-846 8015C

Gasoline Range Organics (2-Methylpentane through 1,2,4-Trimethylbenzene) is quantitated against a calibration made with an unleaded gasoline composite standard. Diesel Range Organics (C10-C28) is quantitated against a calibration made with a \#2 fuel oil standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, uniess specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.


Johanna K. Harrington
Manager, Laboratory Reporting
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-01-3.5-4ft
Sampled: 11/18/2015 10:30
Sample ID: 15K0903-01
Sample Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 0.096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Acrylonitrile | ND | 0.0058 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Benzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Bromobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Bromochloromethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Bromodichloromethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Bromoform | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | ṠW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Bromomethane | ND | 0.0096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 2-Butanone (MEK) | ND | 0.039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| n-Butylbenzene | ND | 0.0039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| sec-Butylbenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| tert-Butylbenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Carbon Disulfide | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Carbon Tetrachloride | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Chlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Chlorodibromomethane | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Chloroethane | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Chloroform | ND | 0.0039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Chloromethane | ND | 0.0096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 2-Chlorotoluene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 4-Chlorotoluene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Dibromomethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1-Dichloroethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2-Dichloroethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1-Dichloroethylene | ND | 0.0039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2-Dichloropropanc | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,3-Dichloropropane | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 2,2-Dichloropropane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1-Dichloropropene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| cis-1,3-Dichloropropene | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| trans-1,3-Dichloropropene | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Diethyl Ether | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
|  |  |  |  |  |  |  |  | Page 10 | of 73 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

| Project Location: Hylan Blvd. Staten Island, NY | Sample Description: |
| :--- | :--- |
| Date Received: $11 / 19 / 2015$ |  |
| Field Sample \#: SB-01-3.5-4ft | Sampled: $11 / 18 / 2015 \quad 10: 30$ |
| Sample ID: $\mathbf{1 5 K 0 9 0 3 - 0 1}$ |  |

Sample Matrix: Soil
Sample Flags: PR-03, PR-15 Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,4-Dioxane | ND | 0.096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Ethylbenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Hexachlorobutadiene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 2-Hexanone (MBK) | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Methylene Chloride | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Naphthalene | ND | 0.0039 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| n -Propylbenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Styrene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1,1,2-Tetrachloroethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1,2,2-Tetrachloroethane | ND | 0.00096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Tetrachloroethylene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Tetrahydrofuran | ND | 0.0096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Toluene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2,3-Trichlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2,4-Trichlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,3,5-Trichlorobenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1,1-Trichloroethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1,2-Trichloroethane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Trichloroethylene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Trichlorofluoromethane (Freon 11) | ND | 0.0096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.0096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| 1,3,5-Trimethylbenzene | 0.0023 | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Vinyl Chloride | ND | 0.0096 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| $m+\mathrm{p}$ Xylene | ND | 0.0039 | mg/Kg dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| o-Xylene | ND | 0.0019 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 10:47 | MFF |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 103 | 70-130 |  |  |  |  | 11/24/15 10:47 |  |
| Toluene-d8 |  | 99.9 | 70-130 |  |  |  |  | 11/24/15 10:47 |  |
| 4-Bromofluorobenzene |  | 92.7 | 70-130 |  |  |  |  | 11/24/15 10:47 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: $11 / 19 / 2015$
Field Sample \#: SB-01-3.5-4ft Sampled: 11/18/2015 10:30
Sample 1D: 15K0903-01
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte |  | Results | RL | Units | Dilution | Flag/Qu | Method | Date Prepared | Date/Time <br> Analyzed | Analysi |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Resuits | RL |  |  |  |  |  |  |  |
| \% Solids |  | 88.0 |  | \% Wt | 1 |  | SM 2540G | 11/24/15 | 11/25/15 11:21 | MRL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Sample Description:
Work Order: 15K0903
Field Sample \#: SB-01-comp Sampled: 11/18/2015 10:30
Sample ID: 15K0903-02
Sample Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Acenaphthylene | 1.3 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Anthracene | 0.78 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Benzo(a)anthracene | 4.3 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Benzo(a)pyrenc | 5.5 | 0.39 | $\mathrm{mg} / \mathrm{Kg}$ dry | 2 |  | SW-846 8270D | 11/20/15 | 11/24/15 20:05 | CMR |
| Benzo(b)fluoranthene | 6.9 | 0.39 | $\mathrm{mg} / \mathrm{Kg}$ dry | 2 |  | SW-846 8270D | 11/20/15 | 11/24/15 20:05 | CMR |
| Benzo(g,h,i)perylene | 3.8 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Benzo(k)fluoranthene | 2.6 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Chrysene | 4.4 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Dibenz(a,h)anthracene | 0.92 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Fluoranthene | 5.9 | 0.39 | $\mathrm{mg} / \mathrm{Kg}$ dry | 2 |  | SW-846 8270D | 11/20/15 | 11/24/15 20:05 | CMR |
| Fluorene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Indeno(1,2,3-cd)pyrene | 3.8 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| 2-Methylnaphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Naphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Phenanthrene | 2.4 | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:05 | CMR |
| Pyrene | 6.7 | 0.39 | $\mathrm{mg} / \mathrm{Kg}$ dry | 2 | V-06 | SW-846 8270D | 11/20/15 | 11/24/15 20:05 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 80.1 | 30-130 |  |  |  |  | 11/23/15 18:05 |  |
| 2-Fluorobiphenyl |  | 81.1 | 30-130 |  |  |  |  | 11/23/15 18:05 |  |
| p-Terphenyl-d14 |  | 82.1 | 30-130 | . |  |  |  | 11/23/15 18:05 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX. 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903

Date Received: 11/19/2015
Field Sample \#: SB-01-comp
Sampled: 11/18/2015 10:30
Sample ID: 15K0903-02
Sample Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1221 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1232 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1242 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1248 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1254 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1260 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KA |
| Aroclor-1262 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Aroclor-1268 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:34 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 80.3 | 30-150 |  |  |  |  | $\begin{array}{lll}11 / 25 / 15 & 16: 34 \\ 11 / 25 / 15 & 16: 34\end{array}$ |  |
| Decachlorobiphenyl [2] |  | 78.4 | 30-150 |  |  |  |  | 1/25/15 16:34 |  |
| Tetrachloro-m-xylene [1] |  | 85.4 | 30-150 |  |  |  |  | $516: 34$ |  |
| Tetrachloro-m-xylene [2] |  | 80.8 | 30-150 |  |  |  |  | 4 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Field Sample \#: SB-01-comp
Sample Description:
Work Order: 15K0903

Sample ID: 15K0903-02
Sample Matrix: Soil
Sample Flags: PR-03
Petroleum Hydrocarbons Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | 5.0 | 1.3 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/23/15 | 11/24/15 17:15 | EEH |
| Diesel Range Organics | 170 | 47 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8015C | 11/20/15 | 11/26/15 5:29 | SCS |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1-Chloro-3-fluorobenzene <br> o-Terphenyl |  | 90.6 71.9 | $\begin{gathered} 70-130 \\ 40-140 \end{gathered}$ |  |  |  |  | $\begin{array}{cc} 11 / 24 / 15 & 17: 15 \\ 11 / 26 / 15 & 5: 29 \end{array}$ |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description:

Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-01-comp
Sampled: 11/18/2015 10:30
Sample ID: 15K0903-02
Sample Matrix: Soil
Metals Analyses (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual |  | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | 30 | 2.8 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |
| Barium | 91 | 2.8 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |
| Cadmium | 1.8 | 0.28 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |
| Chromium | 18 | 0.56 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |
| Lead | 160 | 0.85 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |
| Mercury | 0.12 | 0.028 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 7471B | 11/20/15 | 11/24/15 9:54 | RMS |
| Selenium | ND | 5.6 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |
| Silver | ND | 0.56 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | SW-846 6010C | 11/20/15 | 11/21/15 16:33 | AME |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

| Project Location: Hylan Blvd. Staten Island, NY | Sample Description; |
| :--- | :--- |
| Date Received: $11 / 19 / 2015$ |  |
| Field Sample \#: SB-01-comp | Sampled: $11 / 18 / 201510: 30$ |

Samole ID: 15K0903-02
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 11/20/15 | 11/20/15 11:45 | LL |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/20/15 | 11/20/15 15:30 | AG |
| pH @ $22.4{ }^{\circ} \mathrm{C}$ | 12 |  | pH Units | 1 | H-03 | SW-846 9045C | 11/23/15 | 11/23/15 19:00 | AMM |
| Reactive Cyanide | ND | 3.9 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-8469014 | 11/20/15 | 11/23/15 12:45 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 11/20/15 | 11/23/15 12:30 | AG |
| \% Solids | 87.9 |  | \% Wt | 1 |  | SM 2540G | 11/24/15 | 11/25/15 11:21 | MRL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-01-comp
Sampled: 11/18/2015 10:30
Samole ID: 15K0903-02
Sample Matrix: Soil
TCLP - Metals Analyses

|  | Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury |  | ND | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 7470A | 12/7/15 | 12/7/15 15:57 | SCB |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Field Sample \#: SB-01-comp
Sample Description:
Work Order: 15K0903

Sample ID: 15K0903-02
Sample Matrix: Soil
Sampled: 11/18/2015 10:30

TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | <0.10 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium | 1.01 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | /7/15 0.00 | L |
| Cadmium | $<0.050$ | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | L |
| Lead | 0.66 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium | <0.10 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver | <0.10 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description:

Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-02-2-2.5ft
Sampled: 11/18/2015 11:30
Sample ID: 15K0903-03
Sample Matrix: Soil
Sample Flags: RL-11


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Sample Description:
Work Order: 15K0903
Field Sample \#: SB-02-2-2.5ft
Sampled: 11/18/2015 11:30
Sample ID: 15K0903-03
Sample Matrix: Soil
Sample Flags: RL-11 Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.37 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  |  |  |  | Analyst |
| 1,4-Dioxane |  |  | mging | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
|  | ND | 37 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Ethylbenzene | 5.6 | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Hexachlorobutadiene | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 2-Hexanone (MBK) | ND | 7.4 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5.19 | Ws |
| Isopropylbenzene (Cumene) | 1.3 | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| p-Isopropyltoluene (p-Cymene) | ND | 0.74 | mg/Kg dry | 10 |  |  |  | 11/26/15 5:19 | WSD |
| Methyl Acetate | ND | 7.4 |  |  |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
|  |  | 7.4 | mg/Kg dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Methyl Cyclohexane | 5.5 | 0.74 | mg/Kg dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 |  |
| Methylene Chloride | ND | 3.7 | mg/Kg dry | 10 |  |  |  |  | WSD |
| 4-Methyl-2-pentanone ( |  |  | mg/Kg dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
|  | ND | 7.4 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| aphthalene | 7.6 | 1.5 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 10 |  | SW-846 8260C | 11/24/15 | 1/26/15 5.19 | WSD |
| n-Propylbenzene | 5.1 | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | W-846 8260C |  |  |  |
| Styrene | ND | 0.74 |  |  |  | W-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
|  |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 1,1,1,2-Tetrachloroethane | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 1,1,2,2-Tetrachloroethane | ND | 0.37 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Tetrachloroethylene | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  |  | 11/24/15 | 1/26/15 5.19 |  |
| Tetrahydrofuran | ND | 7.4 |  |  |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Toluene |  | 7.4 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| luene | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 1,2,3-Trichlorobenzenc | ND | 3.7 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 |  |  |
| 1,2,4-Trichlorobenzenc | ND | 0.74 |  |  |  |  | 11/24/15 | 1/26/15 5:19 | WSD |
| 1,3,5-Trichlorobenzene |  | 0.74 | mg/kg dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 1,3,5-Tichorobenzene | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 1,1,1-Trichloroethane | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| 1,1,2-Trichloroethane | ND | 0.74 |  |  |  |  | 1/24/15 | 1/26/5 5.19 | WSD |
| Trichloroethylene |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
|  | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| Trichlorofluoromethane (Freon 11) | ND | 1.5 | mg/Kg dry | 10 |  | SW-846 8260C | 11/24/15 |  |  |
| 1,2,3-Trichloropropane | ND | 1.5 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 1/24/15 | 1/26/15 5:19 | WSD |
| 1,1,2-Trichloro-1,2,2-trifluoroethane <br> (Freon 113) | ND | 0.74 | mg/Kg dry | 10 |  | SW-846 8260C | 11/24/15 | $11 / 26 / 15$ 11/26/15 $5: 19$ | WSD |
| 1,2,4-Trimethylbenzene | 10 | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 $5: 19$ |  |
| 1,3,5-Trimethylbenzene | 4.3 | 0.74 |  | 10 |  |  | 11/24/15 | 11/26/15 $5: 19$ | WSD |
| Vinyl Chloride |  |  | grg dy |  |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
|  | ND | 1.5 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| m +p Xylene | 3.5 | 1.5 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | 11/26/15 5:19 | WSD |
| o-Xylene | ND | 0.74 | $\mathrm{mg} / \mathrm{Kg}$ dry | 10 |  | SW-846 8260C | 11/24/15 | $11 / 26 / 155: 19$ $11 / 26 / 15 \quad 5: 19$ | WSD |
| Surrogates |  | \% Recovery | Recovery Limits |  | lag/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 87.5 | 70-130 |  |  |  |  |  |  |
| Toluene-d8 |  | 98.8 | 70-130 |  |  |  |  | 11/26/15 5:19 |  |
| 4-Bromofluorobenzene |  | 103 | 70-130 |  |  |  |  | 11/26/15 5:19 |  |
|  |  |  |  |  |  |  |  | 11/26/15 5:19 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, N
Date Received: 11/19/2015
Field Sample \#: SB-02-2-2.5ft Sampled: 11/18/2015 11:30
Samole ID: 15K0903-03
Samole Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-02-comp
Sampled: 11/18/2015 11:30
Sample ID: 15K0903-04
Sample Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Acenaphthylene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Benzo(a)anthracene | 0.47 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Benzo(a)pyrene | 0.62 | 0.20 | mg/Kg dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Benzo(b)fluoranthene | 0.96 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Benzo(g,h,i)perylene | 0.49 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Benzo(k)fluoranthene | 0.31 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Chrysene | 0.53 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Dibenz(a,h)anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Fluoranthene | 0.66 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Fluorene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Indeno(1,2,3-cd)pyrene | 0.51 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| 2-Methylnaphthalene | 9.6 | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8270D | 11/20/15 | 11/24/15 20:29 | CMR |
| Naphthalene | 7.5 | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8270D | 11/20/15 | 11/24/15 20:29 | CMR |
| Phenanthrene | 0.40 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Pyrene | 0.68 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:31 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 78.6 | 30-130 |  |  |  |  | 11/23/15 18:31 |  |
| 2-Fluorobiphenyl |  | 83.2 | 30-130 |  |  |  |  | 11/23/15 18:31 |  |
| p-Terphenyl-d14 |  | 84.2 | 30-130 |  |  |  |  | 11/23/15 18:31 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description: Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-02-comp Sampled: 11/18/2015 11:30
Sample ID: 15K0903-04
Samole Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1221 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1232 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1242 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1248 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1254 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1260 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1262 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Aroclor-1268 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 16:47 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 76.1 | 30-150 |  |  |  |  | 11/25/15 16:47 |  |
| Decachlorobiphenyl [2] |  | 68.4 | 30-150 |  |  |  |  | 11/25/15 16:47 |  |
| Tetrachloro-m-xylene [1] |  | 81.2 | 30-150 |  |  |  |  | 11/25/15 16:47 |  |
| Tetrachloro-m-xylene [2] |  | 74.2 | 30-150 |  |  |  |  | 11/25/15 16:47 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description: Work Order: 15K0903

Date Received: 11/19/2015
Field Sample \#: SB-02-comp Sampled: 11/18/2015 11:30
Sample ID: 15K0903-04
Sample Matrix: Soil
Petroleum Hydrocarbons Analyses

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Field Sample \#: SB-02-comp
Sample Description:
Work Order: 15K0903

Sample ID: 15K0903-04
Sample Matrix: Soil
Metals Analyses (Total)

|  | Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic |  | 6.6 | 3.0 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |
| Barium |  | 110 | 3.0 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |
| Cadmium |  | 1.5 | 0.30 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |
| Chromium |  | 22 | 0.60 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |
| Lead |  | 330 | 0.89 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |
| Mercury |  | 0.24 | 0.030 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 7471B | 11/20/15 | 11/24/15 9:55 | RMS |
| Selenium |  | ND | 6.0 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |
| Silver |  | ND | 0.60 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:38 | AME |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description: Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-02-comp Sampled: 11/18/2015 11:30
Sample ID: 15K0903-04

## Sample Matrix: Soil

## Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 11/20/15 | 11/20/15 11:45 | LL |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/20/15 | 11/20/15 15:30 | AG |
| $\mathrm{pH} @ 21.9^{\circ} \mathrm{C}$ | 8.6 |  | pH Units | 1 | H-03 | SW-846 9045C | 11/23/15 | 11/23/15 19:00 | AMM |
| Reactive Cyanide | ND | 4.0 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9014 | 11/20/15 | 11/23/15 12:45 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 11/20/15 | 11/23/15 12:30 | AG |
| \% Solids | 83.3 |  | \% Wt | 1 |  | SM 2540G | 11/24/15 | 11/25/15 11:21 | MRL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description: Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-02-comp Sampled: 11/18/2015 11:30
Sample ID: 15K0903-04
Sample Matrix: Soil
TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury | ND | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 7470A | 12/7/15 | 12/7/15 15:59 | SCB |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-02-comp Sampled: 11/18/2015 11:30
Sample ID: 15K0903-04
Sample Matrix: Soil
TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium | 1.21 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium | $<0.050$ | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead | 1.01 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |


| 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project Location: Hylan Blvd. Staten Island, NY <br> Date Received: 11/19/2015 | Sample Description: |  |  |  |  |  | Work Order | : 15K0903 |  |
|  |  |  |  |  |  |  |  |  |  |
| Field Sample \#: SB-03-5.5-6ft | Sampled: 11/18/2015 12:45 |  |  |  |  |  |  |  |  |
| Sample ID: 15K0903-05 |  |  |  |  |  |  |  |  |  |
| Sample Matrix: Soil |  |  |  |  |  |  |  |  |  |
| $\begin{array}{r}\text { Sample Flags: PR-03, PR-15 } \\ \\ \cdots-\text { Analyte } \\ \hline\end{array}$ | Volatile Organic Compounds by GC/MS |  |  |  |  |  |  |  |  |
|  | Results | RL | Units | Dilution | Flag/Qual | Method - | Date Prepared | Date/Time Analyzed | Analyst |
| Acetone | 0.38 | 0.13 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | Z-01 | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Acrylonitrile | ND | 0.0075 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Benzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Bromobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Bromochloromethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Bromodichloromethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Bromoform | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Bromomethane | ND | 0.013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 2-Butanone (MEK) | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| n-Butylbenzene | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| sec-Butylbenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| tert-Butylbenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Carbon Disulfide | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Carbon Tetrachloride | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Chlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Chlorodibromomethane | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Chloroethane | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Chloroform | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Chioromethane | ND | 0.013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 2-Chlorotoluene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 4-Chlorotoluene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Dibromomethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1-Dichloroethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2-Dichloroethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1-Dichloroethylene | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2-Dichloropropane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,3-Dichloropropane | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 2,2-Dichloropropane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1-Dichloropropene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| trans-1,3-Dichloropropene | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Dicthyl Ether | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
|  |  |  |  |  |  |  |  | Page 30 | of 73 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Field Sample \#: SB-03-5.5-6ft Sampled: $11 / 18 / 2015$ 12:45
Sample ID: 15K0903-05
Sample Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,4-Dioxane | ND | 0.13 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Ethylbenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Hexachlorobutadiene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 2-Hexanone (MBK) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Methylene Chloride | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Naphthalene | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| n-Propylbenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Styrene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1,1,2-Tetrachloroethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1,2,2-Tetrachloroethane | ND | 0.0013 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Tetrachloroethylene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Tetrahydrofuran | ND | 0.013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Toluene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2,3-Trichlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2,4-Trichlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,3,5-Trichlorobenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1,1-Trichloroethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1,2-Trichloroethane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Trichloroethylene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Trichlorofluoromethane (Freon 11) | ND | 0.013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| 1,3,5-Trimethylbenzene | 0.0031 | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1. |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Vinyl Chloride | ND | 0.013 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| $\mathrm{m}+\mathrm{p}$ Xylene | ND | 0.0050 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| o-Xylene | ND | 0.0025 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 11/24/15 | 11/24/15 13:05 | MFF |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 105 | 70-130 |  |  |  |  | 11/24/15 13:05 |  |
| Toluene-d8 |  | 100 | 70-130 |  |  |  |  | 11/24/15 13:05 |  |
| 4-Bromofluorobenzene |  | 90.8 | 70-130 |  |  |  |  | 11/24/15 13:05 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY Sample Description: Work Order: 15 K 0903
Date Received: 11/19/2015
Field Sample \#: SB-03-5.5-6ft Sampled: 11/18/2015 12:45
Sample ID: 15K0903-05
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)


Project Location: Hylan Blvd. Staten Island, NY
Date Received: 11/19/2015
Field Sample \#: SB-03-comp Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Acenaphthylene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Benzo(a)anthracene | 0.24 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Benzo(a)pyrene | 0.32 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Benzo(b)fluoranthene | 0.49 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Benzo(g,h, ${ }^{\text {i }}$ )perylene | 0.22 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Benzo(k)fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Chrysene | 0.29 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Dibenz( $\mathrm{a}, \mathrm{h}$ )anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Fluoranthene | 0.33 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Fluorene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Indeno(1,2,3-cd)pyrene | 0.22 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| 2-Methylnaphthalene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Naphthalene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Phenanthrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Pyrene | 0.35 | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/20/15 | 11/23/15 18:55 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzenc-d5 |  | 91.4 | 30-130 |  |  |  |  | 11/23/15 18:55 |  |
| 2-Fluorobipheny! |  | 96.9 | 30-130 |  |  |  |  | 11/23/15 18:55 |  |
| p-Terphenyl-d14 |  | 102 | 30-130 |  |  |  |  | 11/23/15 18:55 |  |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-03-comp
Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1221 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1232 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1242 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1248 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1254 [1] : | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1260 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1262 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Aroclor-1268 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/21/15 | 11/25/15 17:00 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 86.0 | 30-150 |  |  |  |  | 11/25/15 17:00 |  |
| Decachlorobiphenyl [2] |  | 77.6 | 30-150 |  |  |  |  | 11/25/15 17:00 |  |
| Tetrachloro-m-xylene [1] |  | 87.6 | 30-150 |  |  |  |  | 11/25/15 17:00 |  |
| Tetrachloro-m-xylene [2] |  | 85.1 | 30-150 |  |  |  |  | 11/25/15 17:00 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-03-comp
Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
Petroleum Hydrocarbons Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Methed | $\begin{gathered} \text { Date } \\ \text { Prepared } \end{gathered}$ | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 1.3 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/25/15 | 11/25/15 18:30 | EEH |
| Diesel Range Organics | 33 | 9.7 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/20/15 | 11/26/15 4:05 | SCS |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1-Chloro-3-fluorobenzene |  | 90.3 | 70-130 |  |  |  |  | 11/25/15 18:30 |  |
| o-Terphenyl |  | 60.0 | 40-140 |  |  |  |  | 11/26/15 4:05 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903

Date Received: 11/19/2015
Field Sample \#: SB-03-comp
Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
Metals Analyses (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | ND | 2.9 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:42 | AME |
| Barium | 37 | 2.9 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:42 | AME |
| Cadmium | 0.49 | 0.29 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:42 | AME |
| Chromium | 16 | 0.58 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:42 | AME |
| Lead | 34 | 0.87 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:42 | AME |
| Mercury | 0.044 | 0.029 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 7471B | 11/20/15 | 11/24/15 9:57 | RMS |
| Selenium | ND | 5.8 | $\frac{\mathrm{mg}}{\mathbf{\prime} / \mathrm{Kg} \text { dry }}$ | 1 |  | SW-8466010C | 11/20/15 | 11/21/15 16:42 | AME |
| Silver | ND | 0.58 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 6010C | 11/20/15 | 11/21/15 16:42 | AME |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-03-comp Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 11/20/15 | 11/20/15 11:45 | LL |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/20/15 | 11/20/15 15:30 | AG |
| pH @ $20.9{ }^{\circ} \mathrm{C}$ | 11 |  | pH Units | 1 | H-03 | SW-846 9045C | 11/23/15 | 11/23/15 19:00 | AMM |
| Reactive Cyanide | ND | 4.0 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9014 | 11/20/15 | 11/23/15 12:45 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 11/20/15 | 11/23/15 12:30 | AG |
| \% Solids | 85.9 |  | \% Wt | 1 |  | SM 2540G | 11/24/15 | 11/25/15 11:21 | MRL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description:
Work Order: 15K0903

Date Received: 11/19/2015
Field Sample \#: SB-03-comp
Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
TCLP - Metals Analyses


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd. Staten Island, NY
Sample Description;
Work Order: 15K0903
Date Received: 11/19/2015
Field Sample \#: SB-03-comp
Sampled: 11/18/2015 12:45
Sample ID: 15K0903-06
Sample Matrix: Soil
TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium | 0.44 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium | <0.050 | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## Sample Extraction Data

Prep Method: \% Solids-SM 2540G

| Lab Number [Field ID] | Batch | Date |
| :--- | :--- | :--- |
| $15 \mathrm{~K} 0903-01$ [SB-01-3.5-4ft] | B136188 | $11 / 24 / 15$ |
| $15 \mathrm{~K} 0903-02$ [SB-01-comp] | B136188 | $11 / 24 / 15$ |
| 15 K 0 S03-03 [SB-02-2-2.5ft] | B136188 | $11 / 24 / 15$ |
| $15 \mathrm{~K} 0903-04$ [SB-02-comp] | B136188 | $11 / 24 / 15$ |
| $15 \mathrm{~K} 0903-05$ [SB-03-5.5-6ft] | B136188 | $11 / 24 / 15$ |
| $15 \mathrm{~K} 0903-06$ [SB-03-comp] | B136188 | $11 / 24 / 15$ |

SW-846 1030

| Lab Number [Field ID] | Batch | Initial [g] | Date |
| :---: | :---: | :---: | :---: |
| 15K0903-02 [SB-01-comp] | B135948 | 50.0 | 11/20/15 |
| 15K0903-04 [SB-02-comp] | B135948 | 50.0 | 11/20/15 |
| $15 \mathrm{~K} 0903-06$ [SB-03-comp] | B135948 | 50.0 | 11/20/15 |

Prep Method: SW-846 3050B-SW-846 6010C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :---: | :---: | :---: | :---: | :---: |
| 15K0903-02 [SB-01-comp] | B135926 | 1.01 | 50.0 | 11/20/15 |
| 15K0903-04 [SB-02-comp] | B135926 | 1.01 | 50.0 | 11/20/15 |
| 15K0903-06 [SB-03-comp] | B135926 | 1.01 | 50.0 | 11/20/15 |

Prep Method: SW-846 7470A Prep-SW-846 7470A
Leachates were extracted on 12/3/2015 per SW-846 1311 in Batch B136827

| Lab Number [Field ID] | Batch | Initial [mL] | Final [mL] | Date |
| :---: | :---: | :---: | :---: | :---: |
| 15K0903-02 [SB-01-comp] | B136998 | 6.00 | 6.00 | 12/07/15 |
| 15K0903-04 [SB-02-comp] | B136998 | 6.00 | 6.00 | 12/07/15 |
| 15K0903-06 [SB-03-comp] | B136998 | 6.00 | 6.00 | 12/07/15 |

Prep Method: SW-846 7471-SW-846 7471B

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :---: | :---: | :---: | :---: | :---: |
| 15K0903-02 [SB-01-comp] | B135929 | 0.602 | 50.0 | 11/20/15 |
| 15K0903-04 [SB-02-comp] | B135929 | 0.601 | 50.0 | 11/20/15 |
| 15K0903-06 [SB-03-comp] | B135929 | 0.602 | 50.0 | 11/20/15 |

## Prep Method: SW-846 3546-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :---: | :---: | :---: | :---: | :---: |
| 15K0903-02 [SB-01-comp] | B135918 | 30.1 | 1.00 | 11/20/15 |
| 15K0903-04 [SB-02-comp] | B135918 | 30.0 | 1.00 | 11/20/15 |
| 15K0903-06 [SB-03-comp] | B135918 | 30.0 | 1.00 | 11/20/15 |

## Prep Method: SW-846 5035/5030B-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :---: | :---: | :---: | :---: | :---: |
| 15K0903-02 [SB-01-comp] | B136156 | 15.0 | 16.9 | 11/23/15 |

## Sample Extraction Data

## Prep Method: SW-846 5035/5030B-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K0903-04 [SB-02-comp] | B136331 | 15.8 | 17.7 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 0903-06$ [SB-03-comp] | B136331 | 15.0 | 17.2 | $11 / 25 / 15$ |

Prep Method: SW-846 3546-SW-846 8082A

| Lab Number [Field ID] | Batch | Initial [gl | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K0903-02 [SB-01-comp] | B136022 | 10.2 | 10.0 | $11 / 21 / 15$ |
| 15K0903-04 [SB-02-comp] | B136022 | 10.3 | $11 / 21 / 15$ |  |
| $15 \mathrm{~K} 0903-06[$ SB-03-comp] | B136022 | 10.1 | 10.0 | $11 / 21 / 15$ |

Prep Method: SW-846 5035-SW-846 8260C

| Lab Number [Field ID] | Batch | Sample <br> Amount(g) | Methanol Volume (mL) | Methanol <br> Aliquet(mL) | $\begin{gathered} \text { Final } \\ \text { Volume(mL) } \end{gathered}$ | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15K0903-03 [SB-02-2-2.5ft] | B135111 | 15.1 | 18.0 | 0.1 | 50 | 11/24/15 |

Prep Method: SW-846 5035-SW-846 8260C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 0903-01$ [SB-01-3.5-4ft] | B136243 | 5.90 | 10.0 | $11 / 24 / 15$ |
| $15 \mathrm{~K} 0903-05[S B-03-5.5-6 \mathrm{ft}]$ | B136243 | 4.70 | 10.0 | $11 / 24 / 15$ |

Prep Method: SW-846 3546-SW-846 8270D

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K0903-02 [SB-01-comp] | B135920 | 30.0 | 1.00 | $11 / 20 / 15$ |
| 15K0903-02RE1 [SB-01-comp] | B135920 | 30.0 | $11 / 20 / 15$ |  |
| 15K0903-04 [SB-02-comp] | B135920 | 30.1 | $11 / 20 / 15$ |  |
| 15K0903-04RE1 [SB-02-comp] | B135920 | 30.1 | 1.00 | $11 / 20 / 15$ |
| 15K0903-06 [SB-03-comp] | B135920 | 30.0 | 1.00 | $11 / 20 / 15$ |

SW-846 9014

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K0903-02 [SB-01-comp] | B135950 | 25.6 | 250 | $11 / 20 / 15$ |
| $15 \mathrm{~K} 0903-04$ [SB-02-comp] | B135950 | 25.2 | 250 | $11 / 20 / 15$ |
| $15 \mathrm{~K} 0903-06$ [SB-03-comp] | B135950 | 25.3 | 250 | $11 / 20 / 15$ |

SW-846 9030A

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 0903-02$ [SB-01-comp] | B135994 | 25.6 | 250 | $11 / 20 / 15$ |
| $15 \mathrm{~K} 0903-04$ [SB-02-comp] | B135994 | 25.2 | 250 | $11 / 20 / 15$ |
| $15 \mathrm{~K} 0903-06$ [SB-03-comp] | B135994 | 25.3 | 250 | $11 / 20 / 15$ |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Sample Extraction Data

SW-846 9045C

| Lab Number [Field ID] | Batch | Initial [g] | Date |
| :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 0903-02$ [SB-01-comp] | B136146 | 20.0 | $11 / 23 / 15$ |
| $15 \mathrm{~K} 0903-04$ [SB-02-comp] | B136146 | 20.0 | $11 / 23 / 15$ |
| $15 \mathrm{~K} 0903-06$ [SB-03-comp] | B136146 | 20.0 | $11 / 23 / 15:$ |

## SW-846 9095B

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 K 0903-02$ [SB-01-comp] | B135935 | 100 | 100 | $11 / 20 / 15$ |
| $15 K 0903-04$ [SB-02-comp] | B135935 | 100 | 100 | $11 / 20 / 15$ |
| $15 K 0903-06$ [SB-03-comp] | B135935 | 100 | 100 | $11 / 20 / 15$ |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

| Analyte | Result | Reporting <br> Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Batch B136111 - SW-846 5035

| Blank (B136111-BLK1) |  |  |  | Prepared: 11/23/15 Analyzed: 11/25/15 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 2.5 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Acrylonitrile | ND | 0.25 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Amyl Methyl Ether (TAME) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Benzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromochloromethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromodichloromethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromoform | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromomethane | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 2-Butanone (MEK) | ND | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Butyl Alcohol (TBA) | ND | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| n-Butylbenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| sec-Butylbenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Butylbenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Carbon Disulfide | ND | 0.15 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Carbon Tetrachloride | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chlorobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chlorodibromomethane | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chloroethane | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chloroform | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chloromethane | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 2-Chlorotoluene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 4-Chlorotoluene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.25 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dibromoethane (EDB) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Dibromomethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dichlorobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,3-Dichlorobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,4-Dichlorobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| trans-1,4-Dichloro-2-butene | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Dichlorodifluoromethane (Freon 12) | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | L-04 |
| 1,1-Dichloroethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dichloroethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,1-Dichloroethylene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| cis-1,2-Dichloroethylene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| trans-1,2-Dichloroethylene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dichloropropane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,3-Dichloropropane | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 2,2-Dichloropropane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,1-Dichloropropene | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| cis-1,3-Dichloropropene | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| trans-1,3-Dichloropropene | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Diethyl Ether | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Diisopropyl Ether (DIPE) | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,4-Dioxane | ND | 2.5 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Ethylbenzenc | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Hexachlorobutadiene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 2-Hexanone (MBK) | ND | 0.50 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Isopropylbenzene (Cumene) | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| p -Isopropyltoluene ( p -Cymene) | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Methyl Acetate | ND | 0.50 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

| Analyte | Result | Reporting <br> Limit | Units | Spike <br> Level | Source Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Batch B136111 - SW-846 5035

| Blank (B136111-BLK1) | Prepared: 11/23/15 Analyzed: 11/25/15 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Methyl Cyclohexane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Methylene Chloride | ND | 0.25 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.50 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Naphthalene | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| n-Propylbenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Styrene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,1,1,2-Tetrachloroethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,1,2,2-Tetrachioroethane | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Tetrachloroethylene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Tetrahydrofuran | ND | 0.50 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Toluene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,2,3-Trichlorobenzene | ND | 0.25 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,2,4-Trichlorobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,3,5-Trichlorobenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,1,1-Trichloroethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,1,2-Trichloroethane | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Trichloroethylene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Trichlorofluoromethane (Freon 11) | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,2,3-Trichloropropane | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,2,4-Trimethylbenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 1,3,5-Trimethylbenzene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Vinyl Chloride | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| $\mathrm{m}+\mathrm{p}$ Xylene | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| o-Xylene | ND | 0.050 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0226 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0250 | 90.4 | 70-130 |  |
| Surrogate: Toluene-d8 | 0.0247 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0250 | 98.7 | 70-130 |  |
| Surrogate: 4-Bromofluorobenzene | 0.0257 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0250 | 103 | 70-130 |  |
| LCS (B136111-BS1) |  |  |  | pared: 1 | ed: 11/2 |  |  |
| Acetone | 0.0911 | 0.057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 | 80.4 | 70-160 | $\dagger$ |
| Acrylonitrile | 0.0123 | 0.0057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 109 | 70-130 |  |
| tert-Amyl Methyl Ether (TAME) | 0.0106 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 93.3 | 70-130 |  |
| Benzene | 0.0111 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.0 | 70-130 |  |
| Bromobenzene | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 101 | 70-130 |  |
| Bromochloromethane | 0.0123 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 109 | 70-130 |  |
| Bromodichloromethane | 0.0106 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 93.7 | 70-130 |  |
| Bromoform | 0.0118 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 104 | 70-130 |  |
| Bromomethane | 0.00720 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 63.5 | 40-130 | $\dagger$ |
| 2-Butanone (MEK) | 0.111 | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 | 97.8 | 70-160 | $\dagger$ |
| tert-Butyl Alcohol (TBA) | 0.109 | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 | 96.2 | 40-130 | $\dagger$ |
| n-Butylbenzene | 0.0110 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 97.5 | 70-130 |  |
| sec-Butylbenzene | 0.0110 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 97.4 | 70-130 |  |
| tert-Butylbenzene | 0.0105 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 92.8 | 70-160 | $\dagger$ |
| tert-Butyl Ethyl Ether (TBEE) | 0.0109 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 96.0 | 70-130 |  |
| Carbon Disulfide | 0.00989 | 0.0034 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 87.3 | 70-130 |  |
| Carbon Tetrachloride | 0.0107 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 94.8 | 70-130 |  |
| Chlorobenzene | 0.0108 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 94.9 | 70-130 |  |
| Chlorodibromomethane | 0.0109 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 96.0 | 70-130 |  |
| Chloroethane | 0.0115 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 101 | 70-130 |  |
| Chloroform | 0.0107 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 94.7 | 70-130 |  |
|  |  |  |  |  |  |  | Page 44 of 73 |

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  |  | Reporting Limit | Units | Spike <br> Level | Source Result | \%REC | \%REC <br> Limits | RPD | $\begin{aligned} & \text { RPD } \\ & \text { Limit } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result |  | Units |  |  | \%REC |  |  |  |  |

Batch B136111 - SW-846 5035

| LCS | Prepared: 11/23/15 Analyzed: 11/25/15 |  |  |  |  |  | $\therefore$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon | 0.0101 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 89.3 | 70-130 |  |
| 113) |  |  |  |  |  | 70-130 |  |
| 1,2,4-Trimethylbenzene | 0.0112 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.9 | 70-130 |  |
| 1,3,5-Trimethylbenzene | 0.0120 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 106 | 70-130 |  |
| Vinyl Chloride | 0.00743 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 65.6 | 40-130 |  |
| $\mathrm{m}+\mathrm{p}$ Xylene | 0.0229 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0227 | 101 | 70-130 |  |
| o-Xylene | 0.0112 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.5 | 70-130 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0260 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0283 | 91.7 | 70-130 |  |
| Surrogate: Toluene-d8 | 0.0282 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0283 | 99.7 | 70-130 |  |
| Surrogate: 4-Bromofluorobenzene | 0.0290 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0283 | 102 | 70-130 |  |


| (B | Prepared: 11/23/15 Analyzed: 11/25/15 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | 0.0887 | 0.057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 | 78.2 | 70-160 | 2.72 | 25 |  | $\dagger$ |
| Acrylonitrile | 0.0120 | 0.0057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 106 | 70-130 | 2.14 | 25 |  |  |
| tert-Amyl Methyl Ether (TAME) | 0.0107 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 94.8 | 70-130 | 1.59 | 25 |  |  |
| Benzene | 0.0112 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.9 | 70-130 | 0.914 | 25 |  |  |
| Bromobenzene | 0.0119 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 105 | 70-130 | 3.60 | 25 |  |  |
| Bromochloromethane | 0.0128 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 112 | 70-130 | 3.34 | 25 |  |  |
| Bromodichloromethane | 0.0104 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 91.6 | 70-130 | 2.27 | 25 |  |  |
| Bromoform | 0.0122 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 108 | 70-130 | 3.21 | 25 |  |  |
| Bromomethane | 0.00780 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 68.8 | 40-130 | 8.01 | 25 |  | $\dagger$ |
| 2-Butanone (MEK) | 0.109 | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 | 95.9 | 70-160 | 1.94 | 25 |  | $\dagger$ |
| tert-Butyl Alcohol (TBA) | 0.102 | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 | 90.4 | 40-130 | 6.23 | 25 |  | $\dagger$ |
| n-Butylbenzene | 0.0116 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 102 | 70-130 | 4.51 | 25 |  |  |
| sec-Butylbenzene | 0.0113 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 99.9 | 70-130 | 2.53 | 25 |  |  |
| tert-Butylbenzene | 0.0109 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 95.8 | 70-160 | 3.18 | 25 |  | $\dagger$ |
| tert-Butyl Ethyl Ether (TBEE) | 0.0109 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 96.6 | 70-130 | 0.623 | 25 |  |  |
| Carbon Disulfide | 0.00960 | 0.0034 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 84.7 | 70-130 | 3.02 | 25 |  |  |
| Carbon Tetrachloride | 0.0110 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 96.7 | 70-130 | 1.98 | 25 |  |  |
| Chlorobenzene | 0.0112 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.9 | 70-130 | 4.13 | 25 |  |  |
| Chlorodibromomethane | 0.0110 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 96.7 | 70-130 | 0.726 | 25 |  |  |
| Chloroethane | 0.0109 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 96.2 | 70-130 | 4.97 | 25 |  |  |
| Chloroform | 0.0105 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 92.6 | 70-130 | 2.24 | 25 |  |  |
| Chloromethane | 0.00865 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 76.3 | 70-130 | 0.526 | 25 |  |  |
| 2-Chlorotoluene | 0.0111 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.2 | 70-130 | 0.203 | 25 |  |  |
| 4-Chiorotoluene | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 100 | 70-130 | 0.901 | 25 |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0113 | 0.0057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 99.4 | 70-130 | 2.14 | 25 |  |  |
| 1,2-Dibromoethane (EDB) | 0.0119 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 105 | 70-130 | 4.18 | 25 |  |  |
| Dibromomethane | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 101 | 70-130 | 5.28 | 25 |  |  |
| 1,2-Dichlorobenzene | 0.0108 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 95.1 | 70-130 | 4.30 | 25 |  |  |
| 1,3-Dichlorobenzene | 0.0109 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 95.9 | 70-130 | 2.64 | 25 |  |  |
| 1,4-Dichlorobenzene | 0.0104 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 91.5 | 70-130 | 0.768 | 25 |  |  |
| trans-1,4-Dichloro-2-butene | 0.0106 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 93.3 | 70-130 | 4.72 | 25 |  |  |
| Dichlorgdifluoromethane (Freon 12) | 0.00394 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 34.8 | 40-160 | 0.287 | 25 | L-04 | $\dagger$ |
| 1,1-Dichloroethane | 0.0111 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 98.1 | 70-130 | 1.62 | 25 |  |  |
| 1,2-Dichloroethane | 0.0101 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 88.9 | 70-130 | 3.67 | 25 |  |  |
| 1,1-Dichloroethylene | 0.0100 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 88.3 | 70-130 | 1.94 | 25 |  |  |
| cis-1,2-Dichloroethylene | 0.0106 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 93.7 | 70-130 | 0.965 | 25 |  |  |
| trans-1,2-Dichloroethylene | 0.0103 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 90.7 | 70-130 | 2.29 | 25 |  |  |
| 1,2-Dichloropropane | 0.0116 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 103 | 70-130 | 3.27 | 25 |  |  |
| 1,3-Dichloropropane | 0.0115 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 102 | 70-130 | 3.40 | 25 |  |  |
| 2,2-Dichloropropane | 0.0104 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 91.8 | 70-130 | 0.985 | 25 |  |  |
| 1,1-Dichloropropene | 0.0107 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 | 94.4 | 70-130 | 0.528 | 25 |  |  |
|  |  |  |  |  |  |  |  |  | e 46 |  |

## QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | PD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136111 - SW-846 5035

| LCS Dup (B136111-BSD1) |  |  |  | Prepared: 11/23/15 Analyzed: 11/25/15 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cis-1,3-Dichloropropene | 0.0107 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 94.7 | 70-130 | 1.60 | 25 |  |
| trans-1,3-Dichloropropene | 0.0117 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 104 | 70-130 | 6.07 | 25 |  |
| Diethyl Ether | 0.0120 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 106 | 70-130 | 5.43 | 25 |  |
| Diisopropyl Ether (DIPE) | 0.0105 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 92.4 | 70-130 | 5.43 1.53 | 25 |  |
| 1,4-Dioxane | 0.0839 | 0.057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 |  | 74.0 | 40-160 | 10.7 | 50 |  |
| Ethylbenzene | 0.0117 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 103 | 70-130 | 2.36 | 25 |  |
| Hexachlorobutadiene | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 : |  | 100 | 70-160 | 4.27 | 25 |  |
| 2-Hexanone (MBK) | 0.110 | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 |  | 97.1 | 70-160 | 2.59 | 25 |  |
| Isopropylbenzene (Cumene) | 0.0113 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 99.8 | 70-130 | 1.11 | 25 |  |
| p-Isopropyltoluene (p-Cymene) | 0.0120 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 106 | 70-130 | 1.33 | 25 |  |
| Methyl Acetate | 0.0108 | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 95.6 | 70-130 | 1.79 | 25 |  |
| Methyl tert-Butyl Ether (MTBE) | 0.0106 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 93.8 | 70-130 | 2.70 | 25 |  |
| Methyl Cyclohexane | 0.0116 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 102 | 70-130 | 6.06 | 25 |  |
| Methylene Chloride | 0.0106 | 0.0057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 93.4 | 40-160 | 4.04 | 25 |  |
| 4-Methyl-2-pentanone (MIBK) | 0.114 | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.113 |  | 101 | 70-160 | 2.65 | 25 |  |
| Naphthalene | 0.0118 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 104 | 40-130 | 1.25 | 25 |  |
| n -Propylbenzene | 0.0118 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 104 | 70-130 | 3.73 | 25 |  |
| Styrene | 0.0118 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 104 | 70-130 | 0.576 | 25 |  |
| 1,1,1,2-Tetrachloroethane | 0.0117 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 103 | 70-130 | 0.585 | 25 |  |
| 1,1,2,2-Tetrachlorocthane | 0.0123 | 0.00057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 108 | 70-130 | 1.49 | 25 |  |
| Tetrachloroethylene | 0.0113 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 99.4 | 70-130 | 3.27 | 25 |  |
| Tetrahydrofuran | 0.0107 | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 94.8 | 70-130 | 4.97 | 25 |  |
| Toluene | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 101 | 70-130 | 2.41 | 25 |  |
| 1,2,3-Trichlorobenzene | 0.0118 | 0.0057 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 104 | 70-130 | 3.82 | 25 |  |
| 1,2,4-Trichlorobenzene | 0.0117 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 103 | 70-130 | 5.37 | 25 |  |
| 1,3,5-Trichlorobenzene | 0.0113 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 99.3 | 70-130 | 5.38 | 25 |  |
| 1,1,1-Trichloroethane | 0.0103 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 91.2 | 70-130 | 0.550 | 25 |  |
| 1,1,2-Trichloroethane | 0.0117 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 103 | 70-130 | 1.57 | 25 |  |
| Trichloroethylene | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 101 | 70-130 | 2.82 | 25 |  |
| Trichlorofluoromethane (Freon 11) | 0.00908 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 80.1 | 70-130 | 0.250 | 25 |  |
| 1,2,3-Trichloropropane | 0.0123 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 108 | 70-130 | 3.77 | 25 |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 0.0106 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 93.4 | 70-130 | 4.49 | 25 |  |
| 1,2,4-Trimethylbenzene | 0.0115 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 101 | 70-130 | 2.40 | 25 |  |
| 1,3,5-Trimethylbenzene | 0.0124 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 109 | 70-130 | 3.45 | 25 |  |
| Vinyl Chloride | 0.00781 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 68.9 | 40-130 | 4.91 | 25 | $\dagger$ |
| m+p Xylene | 0.0231 | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0227 |  | 102 | 70-130 | 0.888 | 25 |  |
| o-Xylene | 0.0114 | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0113 |  | 101 | 70-130 | 2.51 | 25 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0257 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0283 |  | 90.7 | 70-130 |  |  |  |
| Surrogate: Toluene-d8 | 0.0281 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0283 |  | 99.2 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 0.0289 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0283 |  | 102 | 70-130 |  |  |  |

Batch B136243 - SW-846 5035

| Blank (B136243-BLK1) |  | Prepared \& Analyzed: 11/24/15 |  |
| :--- | :--- | :--- | :--- |
| Acetone | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Acrylonitrile | ND | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Benzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Bromobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Bromochloromethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Bromodichloromethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Bromoform | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 *. TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  |  | Reporting | Units | Spike <br> Level | Source Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units |  |  |  |  |  |  |  |


| Blank (B136243-BLK1) |  |  | -.. Pr |
| :---: | :---: | :---: | :---: |
| Bromomethane | ND | 0.010 m | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 2-Butanone (MEK) | ND | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| tert-Butyl Alcohol (TBA) | ND | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| n -Butylbenzene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| sec-Butylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| tert-Butylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Carbon Disulfide | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Carbon Tetrachloride | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Chlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Chlorodibromomethane | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Chioroethane | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Chloroform | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Chloromethane | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 2-Chlorotoluene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 4-Chlorotoluene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,2-Dibromoethane (EDB) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Dibromomethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,2-Dichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,3-Dichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,4-Dichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| trans-1,4-Dichloro-2-butene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Dichlorodifluoromethane (Freon 12) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,1-Dichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,2-Dichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,1-Dichloroethylene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| cis-1,2-Dichloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| trans-1,2-Dichloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,2-Dichloropropane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,3-Dichloropropane | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 2,2-Dichloropropane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,1-Dichloropropene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| cis-1,3-Dichloropropene | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| trans-1,3-Dichloropropene | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Diethyl Ether | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Diisopropyl Ether (DIPE) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,4-Dioxane | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Ethylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Hexachlorobutadiene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 2-Hexanone (MBK) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Isopropylbenzene (Cumene) | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Methylene Chloride | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Naphthalene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| n-Propylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Styrene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,1,1,2-Tetrachloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| 1,1,2,2-Tetrachloroethane | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |
| Tetrachloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike <br> Level | Source Result | \%REC | \%REC <br> Limits | RPD | RPD Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Batch B136243-SW-846 5035



Page 49 of 73

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control


Batch B136243-SW-846 5035


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |


| LCS Dup (B136243-BSD1) |  | Prepared \& Analyzed: 11/24/15 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | 0.207 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 103 | 70-160 | 0.339 | 25 | V-06 | $\dagger$ |
| Acrylonitrile | 0.0218 | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 109 | 70-130 | 5.19 | 25 |  |  |
| tert-Amyl Methyl Ether (TAME) | 0.0243 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 121 | 70-130 | 3.18 | 25 | V-20 |  |
| Benzene | 0.0233 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 117 | 70-130 | 5.55 | 25 |  |  |
| Bromobenzene | 0.0214 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 107 | 70-130 | 3.04 | 25 |  |  |
| Bromochloromethane | 0.0264 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 132 | * 70-130 | 7.97 | 25 | L-07 |  |
| Bromodichloromethane | 0.0227 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 114 | 70-130 | 2.32 | 25 |  |  |
| Bromoform | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-130 | 4.03 | 25 |  |  |
| Bromomethane | 0.0134 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 67.0 | 40-130 | 12.5 | 25 |  | $\dagger$ |
| 2-Butanone (MEK) | 0.217 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 109 | 70-160 | 3.48 | 25 | V-20 | $\dagger$ |
| tert-Butyl Alcohol (TBA) | 0.306 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 153 | * 40-130 | 0.0327 | 25 | L-02, V-20 | $\dagger$ |
| n-Butylbenzene | 0.0219 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 109 | 70-130 | 4.10 | 25 |  | $\cdots$ |
| sec-Butylbenzene | 0.0241 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 121 | 70-130 | 3.03 | 25 |  |  |
| tert-Butylbenzene | 0.0237 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 118 | 70-160 | 2.57 | 25. |  | $\dagger$ |
| tert-Butyl Ethyl Ether (TBEE) | 0.0248 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 124 | 70-130 | 5.54 | 25 |  |  |
| Carbon Disulfide | 0.0248 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 124 | 70-130 | 5.05 | 25 | V-20 |  |
| Carbon Tetrachloride | 0.0225 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 112 | 70-130 | 2.80 | 25 |  |  |
| Chlorobenzene | 0.0209 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 104 | 70-130 | 2.81 | 25 |  |  |
| Chlorodibromomethane | 0.0204 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 | 70-130 | 0.986 | 25 |  |  |
| Chloroethane | 0.0205 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 | $70-130$ | 2.17 | 25 |  |  |
| Chloroform | 0.0230 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 115 | 70-130 | 3.36 | 25 |  |  |
| Chloromethane | 0.0174 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.8 | 70-130 | 4.00 | 25 |  |  |
| 2-Chlorotoluene | 0.0225 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 113 | 70-130 | 3.71 | 25 |  |  |
| 4-Chlorotoluene | 0.0210 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 105 | 70-130 | 3.19 | 25 |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0212 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 106 | 70-130 | 1.42 | 25 |  |  |
| 1,2-Dibromoethane (EDB) | 0.0224 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 112 | 70-130 | 2.89 | 25 |  |  |
| Dibromomethane | 0.0230 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 115 | 70-130 | 6.20 | 25 |  |  |
| 1,2-Dichlorobenzene | 0.0215 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 107 | 70-130 | 3.80 | 25 |  |  |
| 1,3-Dichlorobenzene | 0.0212 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 106 | 70-130 | 2.97 | 25 |  |  |
| 1,4-Dichlorobenzene | 0.0218 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 109 | 70-130 | 3.83 | 25 |  |  |
| trans-1,4-Dichloro-2-butene | 0.0180 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.0 | 70-130 | 2.09 | 25 |  |  |
| Dichlorodifluoromethane (Freon 12) | 0.0113 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 56.3 | 40-160 | 2.88 | 25 |  | $\dagger$ |
| 1,1-Dichloroethane | 0.0236 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 118 | 70-130 | 2.05 | 25 |  |  |
| 1,2-Dichloroethane | 0.0224 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 112 | 70-130 | 7.30 | 25 |  |  |
| 1,1-Dichloroethylene | 0.0214 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 107 | 70-130 | 4.19 | 25 |  |  |
| cis-1,2-Dichioroethylene | 0.0229 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 115 | 70-130 | 4.19 | 25 |  |  |
| trans-1,2-Dichloroethylene | 0.0230 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 115 | 70-130 | 5.09 | 25 |  |  |
| 1,2-Dichloropropane | 0.0228 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 114 | 70-130 | 3.12 | 25 |  |  |
| 1,3-Dichloropropane | 0.0213 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 107 | 70-130 | 4.31 | 25 |  |  |
| 2,2-Dichloropropane | 0.0265 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 133 | * 70-130 | 1.52 | 25 | L-02, V-20 |  |
| 1,1-Dichloropropene | 0.0240 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 120 | 70-130 | 6.26 | 25 |  |  |
| cis-1,3-Dichloropropene | 0.0214 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 107 | 70-130 | 5.08 | 25 |  |  |
| trans-1,3-Dichloropropene | 0.0233 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 116 | 70-130 | 4.84 | 25 |  |  |
| Diethyl Ether | 0.0205 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 | 70-130 | 5.32 | 25 |  |  |
| Diisopropyl Ether (DIPE) | 0.0222 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 111 | 70-130 | 4.70 | 25 |  |  |
| 1,4-Dioxane | 0.191 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 95.6 | 40-160 | 1.50 | 50 |  | $\dagger \ddagger$ |
| Ethylbenzene | 0.0223 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 112 | 70-130 | 3.37 | 25 |  |  |
| Hexachlorobutadiene | 0.0220 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 110 | 70-160 | 4.64 | 25 |  |  |
| 2-Hexanone (MBK) | 0.228 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 114 | 70-160 | 4.02 | 25 | V-20 | $\dagger$ |
| Isopropylbenzene (Cumene) | 0.0225 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 113 | 70-130 | 4.26 | 25 |  |  |
| p-Isopropyltoluene (p-Cymene) | 0.0238 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 119 | 70-130 | 3.95 | 25 |  |  |
| Methyl tert-Butyl Ether (MTBE) | 0.0243 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 121 | 70-130 | 5.16 | 25 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136243 - SW-846 5035

| LCS Dup (B136243-BSD1) | Prepared \& Analyzed: 11/24/15 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | 0.0247 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 123 | 40-160 | 0.969 | 25 |  |
| 4-Methyl-2-pentanone (MIBK) | 0.229 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 114 | 70-160 | 2.60 | 25 | V-20 |
| Naphthalene | 0.0187 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.6 | 40-130 | 6.39 | 25 |  |
| n-Propylbenzene | 0.0229 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 114 | 70-130 | 2.92 | 25 |  |
| Styrene | 0.0212 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 106 | 70-130 | 3.76 | 25 |  |
| 1,1,1,2-Tetrachloroethane | 0.0210 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 105 | 70-130 | 1.24 | 25 |  |
| 1,1,2,2-Tetrachloroethane | 0.0217 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet: | 0.0200 | 108 | 70-130 | 5.10 | 25 |  |
| Tetrachloroethylene | 0.0209 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 104 | 70-130 | 6.02 | 25 |  |
| Tetrahydrofuran | 0.0203 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-130 | 0.693 | 25 |  |
| Toluene | 0.0222 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 111 | 70-130 | 3.58 | 25 |  |
| 1,2,3-Trichlorobenzene | 0.0182 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.1 | 70-130 | 5.53 | 25 |  |
| 1,2,4-Trichlorobenzene | 0.0177 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.4 | 70-130 | 4.87 | 25 |  |
| 1,3,5-Trichlorobenzene | 0.0189 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 94.5 | 70-130 | 5.10 | 25 |  |
| 1,1,1-Trichloroethane | 0.0249 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 125 | 70-130 | 3.18 | 25 |  |
| 1,1,2-Trichloroethane | 0.0225 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 113 | 70-130 | 3.34 | 25 |  |
| Trichloroethylene | 0.0225 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 112 | 70-130 | 5.39 | 25 |  |
| Trichlorofluoromethane (Freon 11) | 0.0192 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.9 | 70-130 | 4.91 | 25 |  |
| 1,2,3-Trichloropropane | 0.0249 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 124 | 70-130 | 19.7 | 25 |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon | 0.0197 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 98.7 | 70-130 | 4.35 | 25 |  |
| 113) |  |  |  |  |  |  |  |  |  |
| 1,2,4-Trimethylbenzene | 0.0229 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 114 | 70-130 | 2.39 | 25 |  |
| 1,3,5-Trimethylbenzene | 0.0199 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 99.7 | 70-130. | 3.99 | 25 |  |
| Vinyl Chloride | 0.0176 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.1 | 40-130 | 5.84 | 25 |  |
| $\mathrm{m}+\mathrm{p}$ Xylene | 0.0442 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0400 | 111 | 70-130 | 3.82 | 25 |  |
| o-Xylene | 0.0218 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 109 | 70-130 | 3.75 | 25 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0529 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 106 | 70-130 |  |  |  |
| Surrogate: Toluene-d8 | 0.0507 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 101 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 0.0487 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 97.3 | 70-130 |  |  |  |

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

|  |  | Reporting |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B135920 - SW-846 3546

| Blank (B135920-BLK1) |  |  | $\therefore$ | Prepared: 11/20/15 | Analyzed: 11/21/15 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Acenaphthylene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Anthracene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(a)anthracene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(a)pyrene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(b)fluoranthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(g,h,i)perylene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(k)fluoranthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Chrysene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Dibenz(a,h)anthracene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Fluoranthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Fluorene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Indeno( $1,2,3-\mathrm{cd}$ )pyrene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 2-Methylnaphthalene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Naphthalene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Phenanthrene | ND |  | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Pyrene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Surrogate: Nitrobenzene-d5 | 2.30 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 69.0 | 30-130 |  |
| Surrogate: 2-Fluorobiphenyl | 2.52 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 75.5 | 30-130 |  |
| Surrogate: p-Terphenyl-d14 | 3.34 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 100 | 30-130 |  |
| LCS (B135920-BS1) |  |  |  | Prepared: 11/20/15 | Analyzed: 11/21/15 |  |  |
| Acenaphthene | 1.36 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.4 | 40-140 |  |
| Acenaphthylene | 1.35 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.1 | 40-140 |  |
| Anthracene | 1.36 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.9 | 40-140 |  |
| Benzo(a)anthracene | 1.40 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 84.3 | 40-140 |  |
| Benzo(a)pyrene | 1.42 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 85.4 | 40-140 |  |
| Benzo(b)fluoranthene | 1.36 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.7 | 40-140 |  |
| $\operatorname{Benzo}(\mathrm{g}, \mathrm{h}, \mathrm{i})$ perylene | 1.34 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 80.5 | 40-140 |  |
| Benzo(k)fluoranthene | 1.34 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 80.3 | 40-140 |  |
| Chrysene | 1.38 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.8 | 40-140 |  |
| Dibenz(a,h)anthracene | 1.40 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 84.1 | 40-140 |  |
| Fluoranthene | 1.41 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 84.6 | 40-140 |  |
| Fluorene | 1.38 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.7 | 40-140 |  |
| Indeno(1,2,3-cd)pyrene | 1.36 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.4 | 40-140 |  |
| 2-Methylnaphthalene | 1.27 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 76.4 | 40-140 |  |
| Naphthalene | 1.20 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 71.9 | 40-140 |  |
| Phenanthrene | 1.39 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.3 | 40-140 |  |
| Pyrene | 1.39 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.5 | 40-140 |  |
| Surrogate: Nitrobenzene-d5 | 2.85 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 85.6 | 30-130 |  |
| Surrogate: 2-Fluorobiphenyl | 2.78 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 83.5 | 30-130 |  |
| Surrogate: p-Terphenyl-d14 | 3.05 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 91.4 | 30-130 |  |

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

|  |  | Reporting |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B135920 - SW-846 3546

| LCS Dup (B135920-BSD1) | Prepared: 11/20/15 Analyzed: 11/21/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | 1.37 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.4 | 40-140 | 1.20 | 30 |
| Acenaphthylene | 1.39 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.2 | 40-140 | 2.61 | 30 |
| Anthracene | 1.38 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.7 | 40-140 | 0.948 | 30 |
| Benzo(a)anthracene | 1.40 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.7 | 40-140 | 0.714 | 30 |
| Benzo(a)pyrene | 1.45 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 87.3 | 40-140 | 2.13 | 30 |
| Benzo(b)fluoranthene | 1.40 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 84.2 | 40-140 | 2.96 | 30 |
| Benzo(g,h,i)perylene | 1.35 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 80.9 | 40-140 | 0.560 | 30 |
| Benzo(k)fluoranthene | 1.37 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.4 | 40-140 | 2.51 | 30 |
| Chrysene | 1.35 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.1 | 40-140 | 2.12 | 30 |
| Dibenz(a,h)anthracene | 1.39 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.5 | 40-140 | 0.716 | 30 |
| Fluoranthene | 1.40 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.9 | 40-140 | 0.902 | 30 |
| Fluorene | 1.44 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 86.5 | 40-140 | 4.44 | 30 |
| Indeno(1,2,3-cd)pyrene | 1.38 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.8 | 40-140 | 1.68 | 30 |
| 2-Methylnaphthalene | 1.36 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 81.5 | 40-140 | 6.51 | 30 |
| Naphthalene | 1.30 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 78.1 | 40-140 | 8.29 | 30 |
| Phenanthrene | 1.39 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 83.4 | 40-140 | 0.0479 | 30 |
| Pyrene | 1.41 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 84.5 | 40-140 | 1.19 | 30 |
| Surrogate: Nitrobenzene-d5 | 3.05 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 91.5 | 30-130 |  |  |
| Surrogate: 2-Fluorobiphenyl | 2.92 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 87.6 | 30-130 |  |  |
| Surrogate: p-Terphenyl-d14 | 3.05 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 91.5 | 30-130 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136022 - SW-846 3546

| Blank (B136022-BLK1) | Prepared \& Analyzed: 11/21/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1016 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1221 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1221[2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1232 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1232 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1242 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1242 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1248 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1248 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1254 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1254 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | $\cdots$ |  |  |  |  |
| Aroclor-1260 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1260 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1262 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1262 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1268 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1268 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Surrogate: Decachlorobiphenyl | 0.223 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 111 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.211 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 106 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.210 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 105 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.196 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 98.0 | 30-150 |  |  |
| LCS (B136022-BS1) |  |  |  | epared \& |  |  |  |  |
| Aroclor-1016 | 0.22 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 108 | 40-140 |  |  |
| Aroclor-1016 [2C] | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 101 | 40-140 |  |  |
| Aroclor-1260 | 0.22 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 111 | 40-140 |  |  |
| Aroclor-1260 [2C] | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 101 | 40-140 |  |  |
| Surrogate: Decachlorobiphenyl | 0.224 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 112 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.219 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 110 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.204 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 102 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.191 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 95.6 | 30-150 |  |  |
| LCS Dup (B136022-BSD1) |  |  |  | epared \& |  |  |  |  |
| Aroclor-1016 | 0.23 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 114 | 40-140 | 4.88 | 30 |
| Aroclor-1016[2C] | 0.21 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 106 | 40-140 | 5.24 | 30 |
| Aroclor-1260 | 0.23 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 113 | 40-140 | 2.13 | 30 |
| Aroclor-1260 [2C] | 0.21 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 104 | 40-140 | 3.27 | 30 |
| Surrogate: Decachlorobiphenyl | 0.226 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 113 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.212 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 106 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.219 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 109 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.204 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 102 | 30-150 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

| Analyte | Result | Reporting <br> Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Batch B136022 - SW-846 3546

| Matrix Spike (B136022-MS1) | Source: 15K0903-02 |  |  | Prepared: 11/21/15 Analyzed: 11/25/15 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 | 0.25 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 | ND | 111 | 40-140 |
| Aroclor-1016 [2C] | 0.21 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 | ND | 91.5 | 40-140 |
| Aroclor-1260 | 0.20 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 | ND | 87.4 | 40-140 |
| Aroclor-1260 [2C] | 0.22 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 | ND | 96.2 | 40-140 |
| Surrogate: Decachlorobiphenyl | 0.198 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 |  | 87.7 | 30-150 |
| Surrogate: Decachlorobiphenyl [2C] | 0.190 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 |  | 84.1 | 30-150 |
| Surrogate: Tetrachioro-m-xylene | 0.209 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 |  | 92.9 | 30-150 |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.197 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.225 |  | 87.5 | 30-150 |


| Matrix Spike Dup (B136022-MSD1) |  | Source: 15K0903-02 |  |  | Prepared: 11/21/15 Analyzed: 11/25/15 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 |  | 0.23 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 | ND | 104 | 40-140 | 8.42 | 30 |  |
| Aroclor-1016 [2C] |  | 0.19 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 | ND | 86.3 | 40-140 | 7.83 | 30 | - |
| Aroclor-1260 |  | 0.20 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 | ND | 89.5 | 40-140 | 0.459 | 30 | - . |
| Aroclor-1260 [2C] |  | 0.19 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 | ND | 87.0 | 40-140 | 12.0 | 30 |  |
| Surrogate: Decachlorobiphenyl |  | 0.172 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 |  | 77.9 | 30-150 |  |  |  |
| Surrogate: Decachlorobiphenyl [2C] |  | 0.167 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 |  | 75.7 | 30-150 |  |  |  |
| Surrogate: Tetrachloro-m-xylene |  | 0.186 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 |  | 84.4 | 30-150 |  |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] |  | 0.176 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.221 |  | 79.6 | 30-150 |  |  |  |

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B135918-SW-846 3546

| Blank (B135918-BLK1) | Prepared: 11/20/15 Analyzed: 11/21/15 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diesel Range Organics | ND | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Surrogate: o-Terphenyl | 2.94 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 88.2 | 40-140 |  |
| LCS (B135918-BS1) | Prepared: 11/20/15 Analyzed: 11/21/15 |  |  |  |  |  |  |
| Diesel Range Organics | 26.3 | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet | 33.3 | 79.0 | 40-140 |  |
| Surrogate: o-Terphenyl | 2.84 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 85.3 | 40-140 |  |
| LCS Dup (B135918-BSD1) | Prepared: 11/20/15 Analyzed: 11/21/15 |  |  |  |  |  |  |
| Diesel Range Organics | 25.6 | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet | 33.3 | 76.7 | 40-140 | 2.97 |
| Surrogate: 0-Terphenyl | 2.74 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 82.2 | 40-140 |  |

Batch B136156-SW-846 5035/5030B

| Blank (B136156-BLK1) | Prepared: 11/23/15 Analyzed: 11/24/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0143 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 95.2 | 70-130 |
| LCS (B136156-BS1) | Prepared: 11/23/15 Analyzed: 11/24/15 |  |  |  |  |  |
| Gasoline Range Organics (GRO) | 0.263 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 105 | 80-120 |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0141 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 94.1 | 70-130 |


| LCS Dup (B136156-BSD1) | Prepared: 11/23/15 Analyzed: 11/24/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | 0.245 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 98.0 | 80-120 | 7.08 | 30 |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0151 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 101 | 70-130 |  |  |


| Blank (B136331-BLK1) | Prepared \& Analyzed: 11/25/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0141 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 93.9 | 70-130 |  |  |
| LCS (B136331-BS1) |  |  |  | epared \& | /15 |  |  |  |
| Gasoline Range Organics (GRO) | 0.268 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 107 | 80-120 |  |  |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0140 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 93.6 | 70-130 |  |  |
| LCS Dup (B136331-BSD1) |  |  |  | pared \& |  |  |  |  |
| Gasoline Range Organics (GRO) | 0.284 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 114 | 80-120 | 5.91 | 30 |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0145 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 96.5 | 70-130 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Metals Analyses (Total) - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte |  |  | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |


| Batch B135926-SW-846 3050B |  |  |
| :--- | :--- | :--- |
| Blank (B135926-BLK1) | $\therefore$ | Prepared: 11/20/15 Analyzed: 11/21/15 |


| Arsenic | ND |  | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Barium | ND | 2.5 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Cadmium | ND | 0.25 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Chromium | ND | 0.50 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Lead | ND | 0.75 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Selenium | ND | 5.0 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Silver | ND | 0.50 | $\mathrm{mg} / \mathrm{Kg}$ wet | , |  |  |  |  |  |
| LCS (B135926-BS1) |  |  |  | pared: | d: 11/2 |  |  |  |  |
| Arsenic | 93.5 | 5.2 | $\mathrm{mg} / \mathrm{Kg}$ wet | 98.5 | 94.9 | 77.8-122.1 |  |  |  |
| Barium | 296 | 5.2 | $\mathrm{mg} / \mathrm{Kg}$ wet | 308 | 96.2 | 82-117.4 |  |  |  |
| Cadmium | 139 | 0.52 | $\mathrm{mg} / \mathrm{Kg}$ wet | 146 | 95.0 | 81.9-118.2 |  |  |  |
| Chromium | 175 | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet | 182 | 96.4 | 78.7-120.6 |  |  |  |
| Lead | 128 | 1.6 | $\mathrm{mg} / \mathrm{Kg}$ wet | 130 | 98.2 | 82.4-117.8 |  |  |  |
| Selenium | 139 | 10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 154 | 90.1 | 77.1-122.3 |  |  |  |
| Silver | 36.5 | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet | 40.9 | 89.2 | 74.3-125.4 |  |  |  |
| LCS Dup (B135926-BSD1) |  |  |  | pared: | d: 11/2 |  |  |  |  |
| Arsenic | 97.4 | 5.1 | $\mathrm{mg} / \mathrm{Kg}$ wet | 98.5 | 98.9 | 77.8-122.1 | 4.10 | 30 |  |
| Barium | 312 | 5.1 | $\mathrm{mg} / \mathrm{Kg}$ wet | 308 | 101 | 82-117.4 | 5.28 | 30 |  |
| Cadmium | 148 | 0.51 | $\mathrm{mg} / \mathrm{Kg}$ wet | 146 | 102 | 81.9-118.2 | 6.69 | 30 |  |
| Chromium | 180 | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet | 182 | 99.0 | 78.7-120.6 | 2.75 | 30 |  |
| Lead | 157 | 1.5 | $\mathrm{mg} / \mathrm{Kg}$ wet | 130 | 121 | * 82.4-117.8 | 20.9 | 30 | L-07 |
| Selenium | 145 | 10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 154 | 94.1 | 77.1-122.3 | 4.40 | 30 |  |
| Silver | 37.3 | 1.0 | $\mathrm{mg} / \mathrm{Kg}$ wet | 40.9 | 91.1 | 74.3-125.4 | 2.17 | 30 |  |


| MRL Check (B135926-MRL1) |  |  |  | Prepared: $11 / 20 / 15$ Analyzed: $11 / 21 / 15$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lead | 0.630 | 0.69 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.689 | 91.5 | $80-120$ |

Batch B135929-SW-846 7471

| Blank (B135929-BLK1) | Prepared: 11/20/15 Analyzed: 11/24/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury | ND | 0.025 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| LCS (B135929-BS1) | Prepared: 11/20/15 Analyzed: 11/24/15 |  |  |  |  |  |  |  |
| Mercury | 7.87 | 0.79 | $\mathrm{mg} / \mathrm{Kg}$ wet | 7.10 | 111 | 73.7-126.3 |  |  |
| LCS Dup (B135929-BSD1) | Prepared: 11/20/15 Analyzed: 11/24/15 |  |  |  |  |  |  |  |
| Mercury | 8.30 | 0.78 | $\mathrm{mg} / \mathrm{Kg}$ wet | 7.10 | 117 | 73.7-126.3 | 5.32 | 30 |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

|  | Result $\quad \begin{array}{r}\text { Reporting } \\ \text { Limit }\end{array}$ |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte |  |  | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B135950 - SW-846 9014


Batch B135994- SW-846 9030A

| Blank (B135994-BLK1) |  |  |  | Prepared: 11/20/15 Analyzed: 11/23/15 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reactive Sulfide | ND | 2.0 | $\mathrm{mg} / \mathrm{Kg}$ |  |  |  |
| LCS (B135994-BS1) |  |  |  | Prepared: 11/20/15 Analyzed: 11/23/15 |  |  |
| Reactive Sulfide | 16 | 2.0 | $\mathrm{mg} / \mathrm{Kg}$ | 14.8 | 108 | $42.9-132$ |

Batch B136146-SW-846 9045C

| LCS (B136146-BS1) | Prepared \& Analyzed: 11/23/15 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| pH | 6.01 | pH Units | 6.00 | 100 | 98.6-102 |
| LCS (B136146-BS2) | Prepared \& Analyzed: 11/23/15 |  |  |  |  |
| pH | 6.00 | pH Units | 6.00 | 100 | 98.6-102 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
TCLP - Metals Analyses - Quality Control

|  |  | Reporting |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136998 - SW-846 7470A Prep

| Blank (B136998-BLK1) | Prepared \& Analyzed: 12/07/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Merciury | ND | 0.00010 | $\mathrm{mg} / \mathrm{L}$ |  |  |  |  |  |
| LCS (B136998-BS1) | Prepared \& Analyzed: 12/07/15 |  |  |  |  |  |  |  |
| Mercury | 0.00189 | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 0.00200 | 94.7 | 80-120 |  |  |
| LCS Dup (B136998-BSD1) |  |  |  | epared \& | $7 / 15$ |  |  |  |
| Mercury | 0.00193 | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 0.00200 | 96.7 | 80-120 | 2.09 | 20 |


| Matrix Spike (B136998-MS1) | Source: 15K0903-02 |  |  | Prepared \& Analyzed: 12/07/15 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury | 0.00195 | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 0.00200 | ND | 97.3 | 75-125 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES <br> LCS <br> SW-846 8082A

Lab Sample ID: B136022-BS1
Instrument ID (1):

GC Column (1):

| ANALYTE | COL | RT | RT WINDOW |  | CONCENTRATION | \%D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FROM | TO |  |  |
| Aroclor-1016 | 1 | 0.00 | 0.00 | 0.00 | 0.22 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.20 | 8 |
| Aroclor-1260 | 1 | 0.00 | 0.00 | 0.00 | 0.22 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.20 | 10 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES <br> SW-846 8082A

$\square$

| Lab Sample ID: | B136022-BSD1 |  | Date(s) Analyzed: | 11/21/2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instrument ID (1): |  |  | instrument ID (2): |  |  |  |
| GC Column (1): | ID: | (mm) | GC Column (2): |  | ID: | (mm) |


| ANALYTE | COL | RT | RT WINDOW |  | CONCENTRATION | $\% \mathrm{CD}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FROM | TO |  |  |
| Aroclor-1016 | 1 | 0.00 | 0.00 | 0.00 | 0.23 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.21 | 8 |
| Aroclor-1260 | 1 | 0.00 | 0.00 | 0.00 | 0.23 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.21 | 7 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

$\square$
SW-846 8082A
Lab Sample ID: $\quad$ B136022-MS1

Instrument ID (1):
GC Column (1):

$$
\mathrm{ID}: \quad(\mathrm{mm})
$$

| ANALYTE | COL | RT | RT WINDOW |  | CONCENTRATION | $\% \mathrm{CD}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FROM | TO |  |  |
| Aroclor-1016 | 1 | 0.00 | 0.00 | 0.00 | 0.25 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.21 | 17 |
| Aroclor-1260 | 1 | 0.00 | 0.00 | 0.00 | 0.20 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.22 | 11 |

# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES 

Matrix Spike Dup
SW-846 8082A

Lab Sample ID: $\quad$ B136022-MSD1
Instrument ID (1):
GC Column (1):
ID:
(mm)

GC Column (2):
ID:
(mm)

| ANALYTE | COL | RT | RT WINDOW |  | CONCENTRATION | $\% \mathrm{CD}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FROM | TO |  |  |
| Aroclor-1016 | 1 | 0.00 | 0.00 | 0.00 | 0.23 | 0.19 |
| Aroclor-1260 | 2 | 0.00 | 0.00 | 0.00 | 19 |  |
|  | 1 | 0.00 | 0.00 | 0.00 | 0.20 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.19 | 4 |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## FLAG/QUALIFIER SUMMARY

PR-15 According to the NY ELAP program, all voa results less than $0.2 \mathrm{mg} / \mathrm{Kg}$ are estimated and biased low if not

V-06 Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
Z-01
QC result is outside of established limits.
Wide recovery limits established for difficult compound.
Wide RPD limits established for difficult compound.
Data exceeded client recommended or regulatory level
Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
No results have been blank subtracted unless specified in the case narrative section.
Sample received after recommended holding time was exceeded.
Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
Laboratory fortified blanik/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria. Sample preserved in the laboratory, not in the field as required by the method.

## collected according to SW-846 5035-L/5035A-L.

Elevated reporting limit due to high concentration of target compounds.

Acetone is a common laboratory contaminant

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
CERTIFICATIONS


# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 

CERTIFICATIONS
Certified Analyses included in this Report
$\frac{\text { Analyte }}{\text { SW-846 8260C in Soil }}$

Acetone
Acetone
Acrylonitrile
Acrylonitrile
Benzene
Benzene
Bromobenzene
Bromobenzene
Bromochloromethane
Bromochloromethane
Bromodichloromethane
Bromodichloromethane
Bromoform
Bromoform
Bromomethane
Bromomethane
2-Butanone (MEK)
2-Butanone (MEK)
n-Butylbenzene
n-Butylbenzene
sec-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
tert-Butylbenzene
Carbon Disulfide
Carbon Disulfide
Carbon Tetrachloride
Carbon Tetrachloride
Chlorobenzene
Chlorobenzene
Chlorodibromomethane
Chlorodibromomethane
Chlorocthane
Chloroethane
Chloroform
Chloroform
Chloromethane
Chloromethane
2-Chlorotoluene
2-Chlorotoluene
4-Chlorotoluene
4-Chlorotoluene
Dibromomethane
Dibromomethane
1,2-Dichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene

Certifications

CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
NH,NY,ME,VA
NH,NY,ME,VA
NH,NY,ME,VA
NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
NH,NY,ME,VA
NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
CERTIFICATIONS

## Certified Analyses included in this Report

| Analyte | Certifications |
| :---: | :---: |
| SW-8468260C in Soil |  |
| 1,3-Dichlorobenzene | CT,NH,NY,ME,VA |
| 1,4-Dichlorobenzene | CT,NH,NY,ME,VA |
| 1,4-Dichlorobenzene | CT,NH,NY,ME,VA |
| Dichlorodifluoromethane (Freon 12) | NH,NY,ME,VA |
| Dichlorodifluoromethane (Freon 12) | NY,ME,VA |
| 1,1-Dichloroethane | CT,NH,NY,ME,VA |
| 1,1-Dichloroethane | CT,NH,NY,ME,VA |
| 1,2-Dichloroethane | CT,NH,NY,ME,VA |
| 1,2-Dichloroethane | CT,NH,NY,ME,VA |
| 1,1-Dichloroethylene | CT,NH,NY,ME,VA |
| 1,1-Dichloroethylene | CT,NH,NY,ME,VA |
| cis-1,2-Dichloroethylene | CT,NH,NY,ME,VA |
| cis-1,2-Dichloroethylene | CT,NH,NY,ME,VA |
| trans-1,2-Dichloroethylene | CT,NH,NY,ME,VA |
| trans-1,2-Dichloroethylene | CT,NH,NY,ME,VA |
| 1,2-Dichloropropane | CT,NH,NY,ME,VA |
| 1,2-Dichloropropane | CT,NH,NY,ME,VA |
| 1,3-Dichloropropane | NH,NY,ME,VA |
| 1,3-Dichloropropane | NH,NY,ME,VA |
| 2,2-Dichloropropane | NH,NY,ME,VA |
| 2,2-Dichloropropane | NH,NY,ME,VA |
| 1,1-Dichloropropene | NH,NY,ME,VA |
| 1,1-Dichloropropene | NH,NY,ME,VA |
| cis-1,3-Dichloropropene | CT,NH,NY,ME,VA |
| cis-1,3-Dichloropropene | CT,NH,NY,ME,VA |
| trans-1,3-Dichloropropene | CT,NH,NY,ME,VA |
| trans-1,3-Dichloropropene | CT,NH,NY,ME,VA |
| Ethylbenzene | CT,NH,NY,ME,VA |
| Ethylbenzene | CT,NH,NY,ME,VA |
| Hexachlorobutadiene | NH,NY,ME,VA |
| Hexachlorobutadiene | NH,NY,ME,VA |
| 2-Hexanone (MBK) | CT,NH,NY,ME,VA |
| 2-Hexanone (MBK) | CT,NH,NY,ME,VA |
| Isopropylbenzene (Cumene) | CT,NH,NY,ME,VA |
| Isopropylbenzene (Cumene) | CT,NH,NY,ME,VA |
| p-Isopropyltoluene (p-Cymene) | NH,NY |
| p-Isopropyltoluene (p-Cymene) | NH,NY |
| Methyl tert-Butyl Ether (MTBE) | NY,VA |
| Methyl tert-Butyl Ether (MTBE) | NY,VA |
| Methylene Chloride | CT,NH,NY,ME,VA |
| Methylene Chloride | CT,NH,NY,ME,VA |
| 4-Methyl-2-pentanone (MIBK) | CT,NH,NY,VA |
| 4-Methyl-2-pentanone (MIBK) | CT,NH,NY,VA |
| Naphthalene | NH,NY,ME,VA |
| Naphthalene | NH,NY,ME,VA |
| n-Propylbenzene | NH,NY |
| n-Propylbenzene | NH,NY |

## CERTIFICATIONS

Certified Analyses included in this Report

| Analyte | Certifications |
| :---: | :---: |
| SW-846 8260C in Soil |  |
| Styrene | CT,NH,NY,ME,VA |
| Styrene | CT,NH,NY,ME,VA |
| 1,1,1,2-Tetrachloroethane | CT,NH,NY,ME,VA |
| 1,1,1,2-Tetrachloroethane | CT,NH,NY,ME,VA |
| 1,1,2,2-Tetrachloroethane | CT,NH,NY,ME,VA |
| 1,1,2,2-Tetrachloroethane | CT,NH,NY,ME,VA |
| Tetrachloroethylene | CT,NH,NY,ME,VA |
| Tetrachloroethylene | CT,NH,NY,ME,VA |
| Toluene | CT,NH,NY,ME,VA |
| Toluene | CT,NH,NY,ME,VA |
| 1,2,3-Trichlorobenzene | ME |
| 1,2,4-Trichlorobenzene | NH,NY,ME,VA |
| 1,2,4-Trichlorobenzene | NH,NY,ME,VA |
| 1,3,5-Trichlorobenzene | ME |
| 1,1,1-Trichloroethane | CT,NH,NY,ME,VA |
| 1,1,1-Trichloroethane | CT,NH,NY,ME,VA |
| 1,1,2-Trichloroethane | CT,NH,NY,ME,VA |
| 1,1,2-Trichloroethane | CT,NH,NY,ME,VA |
| Trichloroethylene | CT,NH,NY,ME,VA |
| Trichloroethylene | CT,NH,NY,ME,VA |
| Trichlorofluoromethane (Freon 11) | CT,NH,NY,VA |
| Trichlorofluoromethane (Freon 11) | CT,NH,NY,ME,VA |
| 1,2,3-Trichloropropane | NH,NY,ME,VA |
| 1,2,3-Trichloropropane | NH,NY,ME,VA |
| 1,2,4-Trimethylbenzene | CT,NH,NY,ME,VA |
| 1,2,4-Trimethylbenzene | CT,NH,NY,ME,VA |
| 1,3,5-Trimethylbenzene | CT,NH,NY,ME,VA |
| 1,3,5-Trimethylbenzene | CT,NH,NY,ME,VA |
| Vinyl Chloride | CT,NH,NY,ME,VA |
| Vinyl Chloride | CT,NH,NY,ME,VA |
| $\mathrm{m}+\mathrm{p}$ Xylene | CT,NH,NY,ME,VA |
| $m+p$ Xylenc | CT,NH,NY,ME,VA |
| o-Xylene | CT,NH,NY,ME,VA |
| o-Xylene | CT,NH,NY,ME,VA |

SW-846 8270D in Soil

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrenc
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Chrysene
Dibenz(a,h)anthracene
Fluoranthene

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 <br> certifications

## Certified Analyses included in this Report

| Analyte | Certifications |
| :--- | :--- |
| SW-846 8270D in Soil |  |
| Fluorene | CT,NY,NH,ME,NC,VA |
| Indeno(1,2,3-cd)pyrene | CT,NY,NH,ME,NC,VA |
| 2-Methylnaphthalene | CT,NY,NH,ME,NC,VA |
| Naphthalene | CT,NY,NH,ME,NC,VA |
| Phenanthrene | CT,NY,NH,ME,NC,VA |
| Pyrene | CT,NY,NH,ME,NC,VA |

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

| Code | Description | Number | Expires |
| :--- | :--- | :--- | :---: |
| AIHA | AIHA-LAP, LLC | 100033 | $02 / 1 / 2016$ |
| MA | Massachusetts DEP | M-MA100 | $06 / 30 / 2016$ |
| CT | Connecticut Department of Publilc Health | PH-0567 | $09 / 30 / 2017$ |
| NY | New York State Department of Health | 10899 NELAP | $04 / 1 / 2016$ |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | $02 / 5 / 2016$ |
| RI | Rhode Island Department of Health | LAO00112 | $12 / 30 / 2015$ |
| NC | North Carolina Div. of Water Quality | 652 | $12 / 31 / 2015$ |
| NJ | New Jersey DEP | MA007 NELAP | $06 / 30 / 2016$ |
| FL | Florida Department of Health | E871027 NELAP | $06 / 30 / 2016$ |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | $07 / 30 / 2016$ |
| WA | State of Washington Department of Ecology | C2065 | $02 / 23 / 2016$ |
| ME | State of Maine | 2011028 | $06 / 9 / 2017$ |
| VA | Commonwealth of Virginia | 460217 | $12 / 14 / 2015$ |
| NH-P | New Hampshire Environmental Lab | 2557 NELAP | $09 / 6 / 2016$ |

PROJECT ID: HWR100PAD
Table of Contents
Project Pro posal Provided? (for billing purposes)
Proposal date

ANALYTICAL LABORATORY Emait: info@contestlabs.com www.contestlabs.com Company Name: iden EnginepAS, INC.
Address: 703 forimer fieet,


- omar owebste Project Location: Hylan Blvel, Staten Trand NYFax" Sampled By: CNG caKADOLISKO Email: O OThER
 2× 2

39 Spruce Street
East longmeadow,
East longmeadow, MA 01028 Fax: 413-525-6405

## 39 Spruce $8 t$.

East Longmeadow, MA. 01028

* F: 413-525-8405
www.contesthebs.com


## Sample Receipt Checklist

Page 1 of 2

RECEDED BY:

1) Was the chain(s) of custody relinquished and signed?


## CLIENT NAME:

$\qquad$ $\square 2$ Engineers
2) Does the chain agree with the samples?

If not, explain:
3) Are all the samples in good condition?


DATE:

not, explain:
4) How were the samples received:

On lee Direct from Sampling

Ambient



Yes) No

Were the samples received in Temperature Compliance of $\left(2-6^{\circ} \mathrm{C}\right)$ ?
Temperature ${ }^{\circ} \mathrm{C}$ by Temp gun
Temperature ${ }^{\circ} \mathrm{C}$ by Temp blank
5) Are there Dissolved samples for the lab to filter?

Yes (NO)

Who was notified $\qquad$ Date $\qquad$ Time $\qquad$
6) Are there any RUSH or SHORT HOLDING TIME samples?
$\qquad$ (NO) Who was notified $\qquad$ Date $\qquad$ Time
7) Location where samples are stored:


Permission to subcontract samples? Yes No (Walk-in clients only) if not already approved Client Signature:

Page 2 of 2
Login.Sample Receipt Chocklist
(Rejection Crteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client Question Answer (TruefFalse)

Comment

1) The cooler's custody seal, if present, is intact.
2) The cooler or samples do not appear to have been compromised or tampered with.
3) Samples were received on ice.
4) Cooler Temperature is acceptable.
5) Cooler Temperature is recorded.
6) COC is filled out in ink and legible.
7) COC is filled out with all pertinent information.
8) Field Sampler's name present on COC.
9) There are no discrepancies between the sample IDs on the container and the COC.
10) Samples are received within Holding Time.
11) Sample containers have legible labels.
12) Containers are not broken or leaking.
13) Air Cassettes are not broken/open.
14) Sample collection date/times are provided.
15) Appropriate sample containers are used.
16) Proper collection media used.
17) No headspace sample bottles are completely filled.
18) There is sufficient volume for all requsted analyses, including any requested MSMSDs.
19) Trip blanks provided if applicable.
20) VOA sample vials do not have head space or bubble is $<6 \mathrm{~mm}$ ( $1 / 4^{"}$ ) in diameter.
21) Samples do nol require splitting or compositing.

Who notified of False statements?
Log-In Technician Initials:

Date/Time:
Daterime:

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## December 7, 2015

## Amy Hewson

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, NY 14209-2202

Project Location: Hylan Blvd/Seaview Ave. Staten Island
Client Job Number:
Project Number: 15-008-0265/10779
Laboratory Work Order Number: 15K1264

Enclosed are results of analyses for samples received by the laboratory on November 25, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,


Aaron L. Benoit
Project Manager

## Table of Contents

Sample Summary ..... 4
Case Narrative ..... 6
Sample Results ..... 9
15K1264-01 15K1264-01 ..... 9
15K1264-02
15K1264-03
15K1264-04 ..... 21
15K1264-05 ..... 27
15K1264-06 ..... 30
Sample Preparation Information ..... 36
QC Data ..... 38
Volatile Organic Compounds by GC/MS ..... 38
B136588 ..... 38
Semivolatile Organic Compounds by GC/MS ..... 43
B136421Polychlorinated Biphenyls By GC/ECD
4345
B136379 ..... 45
Petroleum Hydrocarbons Analyses ..... 47
B136376
B136786 ..... 4747
B136887 ..... 47
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) ..... 49
B136471
B136582 ..... 4949
B136616 ..... 49
Table of Contents (continued)50
TCLP - Metals Analyses ..... 50
B136443 ..... 51
Flag/Qualifier Summary ..... 52
Certifications55
Chain of Custody/Sample Receipt

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
LiRo Engineers, Inc.
690 Delaware Avenue REPORT DATE: 12/7/2015
Buffalo, NY 14209-2202
PURCHASE ORDER NUMBER
ATTN: Amy Hewson

PROJECT NUMBER: 15-008-0265/10779

## ANALYTICAL SUMMARY

## WORK ORDER NUMBER: 15K 1264

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.
PROJECT LOCATION: Hylan Blvd/Seaview Ave. Staten Island

| FIELD SAMPLE \# | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SB-04-5.5-6 | 15K1264-01 | Soil |  | SM 2540G |  |
| SB-04-comp | 15K1264-02 |  |  | SW-846 8260C |  |
|  |  | Soil | $\cdots$ | SM 2540G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C | PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-8469014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |
| SB-05-5.5-6 | 15K1264-03 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 8260C |  |
| SB-05-comp | 15K1264-04 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 SW-8466010 |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-846 9014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |
| SB-06-5.5-6 | 15K1264-05 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 8260C |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

LiRo Engineers, Inc.
690 Delaware Avenue Buffalo, NY 14209-2202
ATTN: Amy Hewson

REPORT DATE: 12/7/2015
PURCHASE ORDER NUMBER:

PROJECT NUMBER: $\quad 15-008-0265 / 10779$

## ANALYTICAL SUMMARY

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.
PROJECT LOCATION: Hylan Blvd/Seaview Ave. Staten Island

| FIELD SAMPLE \# | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15K1264-06 | Soil |  | SM 2540G |  |
| SB-06-comp |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A | . |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-8469014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |

## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
SW-846 8015C

## Qualifications:

## PR-03

Sample preserved in the laboratory, not in the field as required by the method

## Analyte \& Samples(s) Qualified:

15K1264-02[SB-04-comp], 15K1264-04[SB-05-comp], 15K1264-06[SB-06-comp]

## SW-846 $8260 C$

## Qualifications:

L-04
Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this
compound is likely to be biased on the low side
Analyte \& Samples(s) Qualified:
Bromomethane
15K 1264-01[SB-04-5.5-6], 15K 1264-03[SB-05-5.5-6], 15K1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
Carbon Disulfide
15K1264-01[SB-04-5.5-6], 15K1264-03[SB-05-5.5-6], 15K1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
Chloromethane
15K1264-01[SB-04-5.5-6], 15K 1264-03[SB-05-5.5-6], 15K1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1

## L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD
between the two LFB/LCS results is within method specified criteria.
Analyte \& Samples(s) Qualified:

## Acetone

B136588-BSD1

## PR-03

Sample preserved in the laboratory, not in the field as required by the method.
Analyte \& Samples(s) Qualified:
15K1264-01[SB-04-5.5-6], 15K1264-03[SB-05-5.5-6], 15K 1264-05[SB-06-5.5-6]

## PR-15

According to the NY ELAP program, all voa results less than $0.2 \mathrm{mg} / \mathrm{Kg}$ are estimated and biased low if not collected according to $\mathrm{SW}-846$
$5035-\mathrm{L} / 5035 \mathrm{~A}-\mathrm{L}$.
Analyte \& Samples(s) Qualified:
$15 \mathrm{~K} 1264-01[\mathrm{SB}-04-5.5-6], 15 \mathrm{~K} 1264-03[\mathrm{SB}-05-5.5-6], 15 \mathrm{~K} 1264-05[\mathrm{SB}-06-5.5-6$ ]

## V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
Analyte \& Samples(s) Qualified:
1,1,2,2-Tetrachloroethane
15K1264-01[SB-04-5.5-6], 15K 1264-03[SB-05-5.5-6], 15K1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
1,2-Dibromo-3-chloropropane (DB
15K1264-01[SB-04-5.5-6], 15K1264-03[SB-05-5.5-6], 15K1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
Dichlorodifluoromethane (Freon 1:
15K1264-01[SB-04-5.5-6], 15K 1264-03[SB-05-5.5-6], 15K 1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
trans-1,4-Dichloro-2-butene
$15 \mathrm{~K} 1264-01$ [SB-04-5.5-6], 15K1264-03[SB-05-5.5-6], 15K 1264-05[SB-06-5.5-6], B136588-BLK1, B136588-BS 1, B136588-BSD1

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 8015C
Gasoline Range Organics (2-Methylpentane through 1,2,4-Trimethylbenzene) is quantitated against a calibration made with an unleaded gasoline composite standard. Diesel Range Organics (C10-C28) is quantitated against a calibration made with a \#2 fuel oil standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.


Tod E. Kopyscinski
Laboratory Director

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description: Work Order: 15K1264

Date Received: 11/25/2015
Field Sample \#: SB-04-5.5-6 Sampled: 11/24/2015 23:30
Sample ID: 15K1264-01
Sample Matrix: Soil
Sample Flags: PR-03, PR-1
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | - Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Acrylonitrile | ND | 0.0067 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Benzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Bromobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Bromochloromethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Bromodichloromethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Bromoform | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Bromomethane | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 2-Butanone (MEK) | ND | 0.045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| n-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| sec-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| tert-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Carbon Disulfide | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Carbon Tetrachloride | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1. |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Chlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Chlorodibromomethane | ND | 0.0011 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Chloroethane | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Chloroform | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MF |
| Chloromethane | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 2-Chlorotoluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 4-Chlorotoluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Dibromomethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1. | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,1-Dichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2-Dichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,1-Dichloroethylene | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2-Dichloropropane | ND | 0.0022 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,3-Dichloropropane | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 2,2-Dichloropropane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,1-Dichloropropene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | . | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| trans-1,3-Dichloropropene | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Diethyl Ether | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
|  |  |  |  |  |  |  |  | Page 9 | of 57 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 Project Location: Hylan Blvd/Seaview Ave. Staten I
Date Received: 11/25/2015
Field Sample \#: SB-04-5.5-6
Sample Description

Sampled: 11/24/2015 23:30
Sample ID: 15K1264-01

## Samole Matrix: Soil

Sample Flags: PR-03, PR-15 Volatile Organic Compounds by GC/MS

| Diisopropyl Ether (DIPE) | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  |  | Analyst |
| 1,4-Dioxane | ND | 0.11 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Ethylbenzene |  |  | mgkg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Hexachlorobutadiene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C |  |  | MFF |
| 2-Hexanone (MBK) | ND | 0.022 | mg/Kg dry | 1 |  |  | 12/1/15 | 12/1/15 10:10 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Methylene Chloride | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
|  | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.022 | mg/Kg dry | 1 |  |  |  | 12/1/15 10:10 | MFF |
| Naphthalene | ND | 0.0045 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| n-Propylbenzene | ND | 0.00 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Styrene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2-Tetrachloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Tetrachloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C |  |  |  |
| 1,1,2,2-Tetrachloroethane | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Tetrachloroethylene |  | 00022 |  |  | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Tetrahydrofuran |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Toluene | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 |  |  |
|  | ND | 0.0022 | mg/Kg dry | 1 |  |  |  |  | MFF |
| 1,2,3-Trichlorobenzene | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2,4-Trichlorobenzene |  | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 2/1/15 10:10 |  |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | W-846 8260 C |  | 12/1/5 10.10 | MFF |
| 1,1,1-Trichloroethane | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,1,2-Trichloroethane | ND |  | Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Trichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Trichiorefluoromethane (Freon 11) | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  | 12/15 10.10 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane |  |  | g/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| (Freon 113) | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0022 |  |  |  |  |  |  |  |
| 1,3,5-Trimethylbenzene |  |  |  | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Vinyl Chlo |  | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
|  | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C |  |  |  |
| m+p Xylene | ND | 0.0045 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| o-Xylene | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| Surrogates |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:10 | MFF |
| 2-Dichloroethane-d4 |  | \% Recovery | Recovery Limits |  | g/Qual |  |  |  |  |
|  |  | 98.7 | 70-130 |  |  |  |  |  |  |
| Toluene-d8 |  | 101 | 70-130 |  |  |  |  | 12/1/15 10:10 |  |
| 4-Bromofluorobenzene |  | 99.1 | 70-130 |  |  |  |  | 12/1/15 10:10 |  |
|  |  |  |  |  |  |  |  | 12/1/15 10:10 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Work Order: 15 K 1264
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Date Received: 11/25/2015
Field Sample \#: SB-04-5.5-6
Sampled: 11/24/2015 23:30
Sample ID: 15K1264-01
Samole Matrix: Soil Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte |  | R | U | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Results | R | \% Wt | 1 |  | $\text { SM } 2540 \mathrm{G}$ | 11/25/15 | 11/28/15 9:58 | MJR |
| \% Solids | 89.8 |  |  |  |  |  |  |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I
Sample Description:
Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-04-comp
Sampled: 11/24/2015 23:30
Sample ID: 15K1264-02
Sample Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Acenaphthylene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Benzo(a)anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Benzo(a)pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Benzo(b)fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Benzo(g,h,i)perylene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Benzo(k)fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Chrysene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Dibenz(a,h)anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Fluorene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Indeno(1,2,3-cd)pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| 2-Methylnaphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Naphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Phenanthrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1. |  | SW-846 8270D | 11/30/15 | 12/1/15 15:05 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 91.6 | 30-130 |  |  |  |  | 12/1/15 15:05 |  |
| 2-Fluorobiphenyl |  | 80.7 | 30-130 |  |  |  |  | 12/1/15 15:05 |  |
| p-Terphenyl-d14 |  | 83.2 | 30-130 |  |  |  |  | 12/1/15 15:05 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Date Received: 11/25/2015
Field Sample \#: SB-04-comp Sampled: 11/24/2015 23:30
Sample ID: 15K1264-02
Sample Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| \%. Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | $\begin{gathered} \text { Date } \\ \text { Prepared } \\ \hline \end{gathered}$ | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1221 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1232 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1242 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1248 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1254 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1260 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1262 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Aroclor-1268 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:07 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 111 | 30-150 |  |  |  |  | 12/3/15 2:07 |  |
| Decachlorobiphenyl [2] |  | 101 | 30-150 |  |  |  |  | $\begin{array}{ll}12 / 3 / 15 & 2: 07 \\ 12 / 3 / 15 & 2: 07\end{array}$ |  |
| Tetrachloro-m-xylene [1] |  | 102 | 30-150 |  |  |  |  | 12/3/15 2:07 |  |
| Tetrachloro-m-xylene [2] |  | 101 | 30-150 |  |  |  |  | /3/15 $\quad 2: 07$ |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description
Work Order: 15 K 1264
Date Received: 11/25/2015
Field Sample \#: SB-04-comp Sampled: 11/24/2015 23:30
Samnle ID: 15K1264-02
Sample Matrix: Soil
Sample Flags: PR-03 Petroleum Hydrocarbons Analyses


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Work Order: 15 K 1264

Date Received: 11/25/2015
Field Sample \#: SB-04-comp $\quad$ Sampled: 11/24/2015 23:30
Sample ID: 15K1264-02
Samole Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| An | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte |  |  |  |  |  | SW-846 9095B | 12/1/15 | 12/1/15 9:45 | LL |
| Free Liquid | Absent |  | present/absent | 1 |  |  | 1/30/15 | 11/30/15 14:45 | AG |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 1/30/5 |  |  |
| @ $22.4{ }^{\circ} \mathrm{C}$ | 8.5 |  | pH Units | 1 |  | SW-846 9045C | 11/25/15 | 11/25/15 18:00 | AM |
| eactive Cyanide | ND | 4.0 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-8469014 | 12/1/15 | 12/1/15 17:35 | AG |
| active Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 12/1/15 | 12/1/15 17:20 | AG |
| \% Solids | 89.9 |  | \% Wt | 1 | ; | SM 2540G | 11/25/15 | 11/28/15 9:58 | MJR |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave Stata
Sample Description:
Work Order: 15 K 1264
Date Received: 11/25/2015
Field Sample \#: SB-04-comp
Sampled: 11/24/2015 23:30
Sample ID: 15K1264-02
Sample Matrix: Soil

## TCLP - Metals Analyses

|  | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury | ND | 0.00010 | mg/ | 1 |  |  |  |  | Analyst |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-04-comp
Sampled: 11/24/2015 23:30
Sample ID: 15K1264-02
Sample Matrix: Soil TCLP - Metals Analyses

|  | Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium |  | 0.27 | 0.1 | mg L | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium |  | $<0.050$ | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead |  | 0.3 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |

Project Location: Hylan Blvd/Seaview Ave. Staten I Date Received: 11/25/2015

Field Sample \#: SB-05-5.5-6
Sampled: 11/24/2015 23:00
Sample 1D: 15K1264-03
Sample Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Acrylonitrile | ND | 0.0066 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Benzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Bromobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Bromochloromethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Bromodichloromethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Bromoform | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Bromomethane | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 2-Butanone (MEK) | ND | 0.044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| n-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| sec-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| tert-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Carbon Disulfide | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Carbon Tetrachloride | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Chlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Chlorodibromomethane | ND | 0.0011 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Chloroethane | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Chloroform | ND | 0.0044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Chloromethane | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 2-Chlorotoluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 4-Chlorotoluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Dibromomethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1-Dichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2-Dichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1-Dichloroethylene | ND | 0.0044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2-Dichloropropane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,3-Dichloropropane | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 2,2-Dichloropropane | ND | 0,0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1-Dichloropropene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| trans-1,3-Dichloropropene | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Diethyl Ether | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
|  |  |  |  |  |  |  |  | Page 18 of 57 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description: Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-05-5.5-6 Sampled: 11/24/2015 23:00
Sample ID: 15K1264-03
Samole Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,4-Dioxane | ND | 0.11 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Ethylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Hexachlorobutadiene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 2-Hexanone (MBK) | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Methylene Chloride | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Naphthalene | ND | 0.0044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| n-Propylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Styrene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1,1,2-Tetrachloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1,2,2-Tetrachloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Tetrachloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Tetrahydrofuran | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Toluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2,3-Trichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2,4-Trichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,3,5-Trichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1,1-Trichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1,2-Trichloroethane | ND | 0.0022 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Trichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Trichlorofluoromethane (Freon 11) | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane <br> (Freon 113) | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| 1,3,5-Trimethylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Vinyl Chloride | ND | 0.011 | - mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| $\mathrm{m}+\mathrm{p}$ Xylene | ND | 0.0044 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| o-Xylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 10:40 | MFF |
| Surrogates |  | \% Recovery | Recovery Lim |  | Flag/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 99.3 | 70-130 |  |  |  |  | 12/1/15 10:40 |  |
| Toluene-d8 |  | 102 | 70-130 |  |  |  |  | 12/1/15 10:40 |  |
| 4-Bromofluorobenzene |  | 97.4 | 70-130 |  |  |  |  | 12/1/15 10:40 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Work Order: 15 K 1264
Date Received: 11/25/2015
Field Sample \#: SB-05-5.5-6
Sampled: 11/24/2015 23:00
Sample ID: 15K1264-03
Samole Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

|  | Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date | Date/Time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% Solids |  | 91.1 | \% Wt |  | 1 | SM 2540 G |  | Prepared | Analyzed | Analyst |
|  |  | 11/25/15 |  |  | 11/28/15 9:58 |  |  | MJR |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Date Received: 11/25/2015
Field Sample \#: SB-05-comp
Sampled: 11/24/2015 23:00
Sample ID: 15K1264-04
Samole Matrix: Soil
Semivolatile Organic Compounds by GC/MS

|  | Results | RL | Units | Difukion | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| An |  |  |  |  |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Acenaphthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-8468270D |  |  | CMR |
| Acenaphthylene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Benzo(a)anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Benzo(a)pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Benzo(b)fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Benzo(g,h,i)perylene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Benzo(k)fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Chrysene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Dibenz(a,h)anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Fluorene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Indeno(123-cd)pyre | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Indeno(1,2,3-cd)pyr |  |  |  | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| 2-Methylnaphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry |  |  |  | 11/30/15 | 12/1/15 15:32 | CMR |
| Naphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-8468270D | 1/30/5 |  |  |
| Phenanthrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 15:32 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  | 12/1/15 15:32 |  |
| Nitrobenzene-d5 |  | 76.3 | 30-130 |  |  |  |  | 12/1/15 15:32 |  |
| 2-Fluorobiphenyl |  | 62.7 | 30-130 |  |  |  |  | 12/1/15 15:32 |  |
| p-Terphenyl-d14 |  | 62.6 | 30-130 |  |  |  |  |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I
Date Received: 11/25/2015
Sample Description:
Work Order: 15K 1264
Field Sample \#: SB-05-comp
Sampled: 11/24/2015 23:00
Sample ID: 15K1264-04

## Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

| Analyte | Resulis | RL | Units | Dilution | Flag/Qual | Method | Date | Date/Time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry |  | MagQual | Method |  | Analyzed | Analyst |
| Aroclor-1221 [1] |  |  | mgKg dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
| Araclor-1221 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
| Aroclor-1232 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 |  | KAL |
| Aroclor-1242 [1] | ND | 0.11 | dry | 5 |  | WW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
| Aroclor-1248 [1] | ND | 0.11 | dry |  |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
|  | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
| coclor-1254 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-84C 8082A | 11/28/15 | 12/3/15 |  |
| Aroclor-1260 [1] | ND | 0.11 |  |  |  |  |  | 12/3/15 2:20 | KAL |
| Aroclor-1262 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
|  | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 | KAL |
| Aroclor-1268 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:20 |  |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 110 | 30-150 |  |  |  |  |  |  |
| Decachlorobiphenyl [2] |  | 99.6 | 30-150 |  |  |  |  | 12/3/15 2:20 |  |
| Tetrachloro-m-xylene [1] |  | 104 | 30-150 |  |  |  |  | 12/3/15 2:20 |  |
| Tetrachloro-m-xylene [2] |  | 105 | 30-150 |  |  |  |  | 12/3/15 2:20 |  |
|  |  |  |  |  |  |  |  | 12/3/15 2:20 |  |



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description
Date Received: 11/25/2015
Field Sample \#: SB-05-comp
Sampled: : 11/24/2015 23:00
Sample ID: 15K1264-04
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 12/1/15 | 12/1/15 9:45 | Analys |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/30/15 | 12/1/ |  |
| pH @ $22.5{ }^{\circ} \mathrm{C}$ | 7.7 |  | pH Units | 1 |  | SW-846 9045C | 11/25/15 | 11/25/15 18:00 | AMM |
| Reactive Cyanide | ND | 3.9 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9014 | 12/1/15 | 12/1/15 17:35 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 12/1/15 | 12/1/15 17:20 | AG |
| \% Solids | 91.2 |  | \% Wt | 1 |  | SM 2540G | 11/25.15 | 11/28/15 9:58 | MJR |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-5405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Work Order: 15 K 1264
Project Location: Hylan Blo
Date Received: 11/25/2015
Field Sample \#: SB-05-comp
Sampled: 11/24/2015 23:00
Sample ID: 15K1264-04
Sample Matrix: Soil
TCLP - Metals Analyses

|  | Enalyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ND | 0.00010 | mg/L | 1 |  | SW-846 7470A | 11/30/15 | 12/1/15 12:08 | SCB |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I
Sample Description
Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-05-comp
Sampled: 11/24/2015 23:00
Sample ID: 15K1264-04
Sample Matrix: Soil
TCLP - Metals Analyses

|  | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | $\frac{1}{1}$ | Hag/Qual | $\frac{\text { Method }}{\text { SW-846 } 6010 \mathrm{C}}$ |  |  | Analyst |
| Barium | 0.37 | 0.1 |  |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium |  |  | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-8466010C | 12/6/15 | 12/7/15 0:00 | PEL |
|  | $<0.050$ | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | $12 / 715$ $12 / 7 / 15000$ | PEL |
| Selenium | $<0.10$ | 0.1 | mg/L | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | $12 / 6 / 15$ $12 / 6 / 15$ | 12/7/15 0:00 | PEL |


| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> inalyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Results |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Acetone | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12 |  |  |
| Acrylonitrile | ND. | 0.0067 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Benzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Bromobenzene |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Bromochloromethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  |  | MFF |
| Bromodichloromethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/15 | 12/15 |  |
| Bromoform | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  |  | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Bromomethane | ND | 0.011 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 2-Butanone (MEK) | ND | 0.045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 |  | 12/1/15 11:09 |  |
| tert-Butyl Alcohol (TBA) | ND | 0.045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12//15 | 12/1/5 11.09 | M |
| e | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Butybenzen |  |  | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| sec-Butylbenzene | ND | 0.0022 | mg/kg dry |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| tert-Butylbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260 C | 12/15 |  |  |
| Butyl Ethyl Ether (TBEE) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Carbon Disulfide |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Carbon Tetrachloride | ND | 0.0022 | g dry | 1 |  |  |  | 12/1/15 11:09 | MFF |
| Chlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/5 11.09 |  |
|  | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Chlorodibromomethane |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Chloroethane | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-8468260C |  | 12/1/15 11.09 | MFF |
| Chloroform | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/15 11.09 |  |
|  | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Chloromethane |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 2-Chlorotoluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  | 12/1/15 11.09 | MFF |
| 4-Chlorotoluene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/5 11.09 |  |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,2-Dibromo-3-chioropropane (DBCP) |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Dibromomethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/5 11.0 |  |
| 1,2-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFr |
| 13-Dichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,3-Dichlorobenzene |  |  | /Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0022 | KKg dy |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ diy | 1 | V-05 | SW-846 8260 C |  |  |  |
| Dichlorodifluoromethane (Freon 12) | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,1-Dichloroe |  |  |  | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,2-Dichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | W-846 8260 C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,1-Dichloroethylene | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/115 |  | F |
| cis-1,2-Dichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/5 | 12/1/5 1.09 |  |
| trans-1,2-Dichloroethylene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 12-Dichloropropane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,2-Dichlorop |  |  |  | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,3-Dichloropropane | ND | 0.0011 | $\mathrm{mg} / \mathrm{kg} \mathrm{dry}$ | 1 |  | W-846 8260C | 12/1/15 | 12/1/15 11:09 | 9 MFF |
| 2,2-Dichloropropane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-8468260C |  | 12/1/15 11.09 | 9 MFF |
| 1,1-Dichloropropene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/5 | 12/1/5 11.09 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/5 1.09 | MrF |
| trans-1,3-Dichloropropene | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/5 11.09 |  |
|  | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Diethyl Ether | ND |  |  |  |  |  |  | Page 27 | 7 of 57 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:

Date Received: 11/25/2015
Field Sample \#: SB-06-5.5-6
Sampled: 11/24/2015 22:30
Sample ID: 15K1264-05
Sample Matrix: Soil
Sample Flags: PR-03, PR-15 Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date | Date/Time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.0011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | MagQual | Method |  |  | Analyst |
| 1,4-Dioxane |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Ethylbenzene |  | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Elulbenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  |  |  |
| Hexachlorobutadiene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 2-Hexanone (MBK) | ND | 0.022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  |  | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C |  |  |  |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0022 |  | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0045 | mg/g dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Methylene Chloride |  |  | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  | 12/1/5 | 12/1/15 11:09 | MFF |
| Naphthalene | ND | 0.0045 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| n-Propylbenzene | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Styrene |  | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | W-846 8260C |  |  |  |
| 1,1,1,2-Tetrachloroethane | ND | 0.0022 |  | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,1,2,2-Tetrachloroethane | ND |  | mgkg dry |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Tetrachloroethylene |  | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Tetrachoroeuthen | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  |  |  |
| Tetrahydrofuran | ND | 0.011 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Toluene |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 |  |
| 1,2,3-Trichlorobenzene | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  | 12/115 $11: 09$ | MFF |
| 1,2,4-Trichlorobenzene | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,3,5-Trichlorobenzene |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| -Trich | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11.09 | MFF |
| 1,1-1-Trichloroethane | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260 C |  |  |  |
| 1,1,2-Trichloroethane | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Trichloroethylene |  |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 |  |
| Trichlorofluoromethane (Freon 11) | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  | 12/1/5 1.09 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0022 |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| (Freon 113) | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0022 |  |  |  |  |  |  |  |
| 1,3,5-Trimethylbenzene |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Vinyl Chloride |  | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.011 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 |  |
| ${ }^{+}+\mathrm{p}$ Xylene | ND | 0.0045 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  |  |  | 12/15 11:09 | MFF |
| o-Xylene |  |  |  |  |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
|  | ND | 0.0022 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:09 | MFF |
| Surrogates |  | \% Recovery | Recovery Limits |  | g/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 97.9 | 70-130 |  | Qual |  |  |  |  |
| Toluene-d8 |  | 101 |  |  |  |  |  | 12/1/15 11:09 |  |
| 4-Bromofluorobenzene |  | 97.7 |  |  |  |  |  | 12/1/15 11:09 |  |
|  |  |  |  |  |  |  |  | 12/1/15 11:09 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Work Order: 15 K 1264
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description
Date Received: 11/25/2015
Field Sample \#: SB-06-5.5-6
Sampled: 11/24/2015 22:30
Sample ID: 15K1264-05
Sample Matrix: Soil Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte |  | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | $\frac{\text { Analyst: }}{\text { MJR }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{88.9}{ }$ |  |  |  |  |  |  | 11/28/15 9:58 |  |
|  |  |  | \% Wt | 1 |  | SM 2540 G | 11/2s/5 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I
Sample Description:
Work Order: 15 K 1264
Date Received: 11/25/2015
Field Sample \#: SB-06-comp
Sampled: 11/24/2015 22:30
Sample ID: 15K1264-06
Sample Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Methord | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Acenaphthylene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Benzo(a)anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Benzo(a)pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Benzo(b)fluoranthene | ND | 0.19 | mg/Kg dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Benzo(g,h,i)perylene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Benzo(k)fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Chrysene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Dibenz(a,h)anthracene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Fluoranthene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Fluorene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Indeno(1,2,3-cd)pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| 2-Methylnaphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Naphthalene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Phenanthrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Pyrene | ND | 0.19 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/30/15 | 12/1/15 16:00 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 75.5 | 30-130 |  |  |  |  | 12/1/15 16:00 |  |
| 2-Fluorobiphenyl |  | 67.2 | 30-130 |  |  |  |  | 12/1/15 16:00 |  |
| p-Terphenyl-d14 |  | 72.0 | 30-130 |  |  |  |  | 12/1/15 16:00 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-06-comp
Sampled: 11/24/2015 22:30
Sample ID: 15K1264-06
Sample Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1221 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1232 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1242 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1248 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1254 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1260 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1262 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Aroclor-1268 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:33 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 106 | 30-150 |  |  |  |  | 12/3/15 2:33 |  |
| Decachlorobiphenyl [2] |  | 96.2 | 30-150 |  |  |  |  | 12/3/15 $2: 33$ |  |
| Tetrachloro-m-xylene [1] |  | 102 | 30-150 |  |  |  |  | 12/3/15 2:33 |  |
| Tetrachloro-m-xylene [2] |  | 101 | 30-150 |  |  |  |  | 12/3/15 2:33 |  |

PROJECT ID: HWR100PAD
Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave. Staten I
Sample Description:
Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-06-comp
Sampled: 11/24/2015 22:30
Sample ID: 15K1264-06
Samole Matrix: Soil
Sample Flags: PR-03 Petroleum Hydrocarbons Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 1.2 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 12/3/15 | 12/3/15 19:11 | EEH |
| Diesel Range Organics | 13 | 9.3 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/28/15 | 12/3/15 5:29 | SCS |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1-Chloro-3-fluorobenzene |  | 116 | 70-130 |  |  |  |  | 12/3/15 19:11 |  |
| o-Terphenyl |  | 79.3 | 40-140 |  |  |  |  | 12/3/15 5:29 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Seaview Ave Staten I Sample Description
Work Order: 15K1264
Date Received: 11/25/2015
Field Sample \#: SB-06-comp
Sampled: 11/24/2015 22:30
Samole ID: 15K1264-06
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 12/1/15 | 12/1/15 9:45 | LL |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/30/15 | 11/30/15 14:45 | AG |
| pH @ $24.6{ }^{\circ} \mathrm{C}$ | 8.1 |  | pH Units | 1 |  | SW-846 9045C | 11/25/15 | 11/25/15 18:00 | AMM |
| Reactive Cyanide | ND | 3.9 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9014 | 12/1/15 | 12/1/15 17:35 | AG |
| Reactive Sulfide | ND | 19 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 12/1/15 | 12/1/15 17:20 | AG |
| \% Solids | 89.3 |  | \% Wt | 1 |  | SM 2540 G | 11/25/15 | 11/28/15 9:58 | MJR |

39 Spruce Street * East Longmeadow, MA 01028 *.FAX 413/525-6405 * TEL. 413/525-2332


## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hylan Blvd/Seaview Ave. Staten I Sample Description:
Work Order: 15 K 1264
Date Received: 11/25/2015
Field Sample \#: SB-06-comp Sampled: 11/24/2015 22:30
Sample ID: 15K1264-06
Sample Matrix: Soil
TCLP - Metals Analyses

| $:$ | Analyte | Results | RL | Units | Dilution | Flag/Qual | $\cdots$ | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium |  | 0.24 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium |  | $<0.050$ | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead |  | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium |  | $<0.10$ | 0.1 | mg L | 1 |  |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver |  | $<0.10$ | 0.1 | mg/L | 1 |  |  | SW-846 6010C. | 12/6/15 | 12/7/15 0:00 | PEL |

## Sample Extraction Data

Prep Method: \% Solids-SM 2540G

| Lab Number [Field ID] | Batch | Date |
| :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-01$ [SB-04-5.5-6] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-02[\mathrm{SB}-04-\mathrm{comp}]$ | B 136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-03$ [SB-05-5.5-6] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-04[S B-05-\mathrm{comp}]$ | B 136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-05[\mathrm{SB}-06-5.5-6]$ | B 136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B 136359 | $11 / 25 / 15$ |

SW-846 1030

| Lab Number [Field ID] | Batch | Initial [g] | Date |
| :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-02[\mathrm{SB}-04$-comp] | B136456 | 50.0 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1264-04[\mathrm{SB}-05-\mathrm{comp}]$ | B136456 | 50.0 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B136456 | 50.0 | $11 / 30 / 15$ |

## Prep Method: SW-846 7470A Prep-SW-846 7470A Leachates were extracted on 11/29/2015 per SW-846 1311 in Batch B136408

| Lab Number [Field ID] | Batch | Initial [mL] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1264-02 [SB-04-comp] | B136443 | 6.00 | 6.00 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1264-04[$ SB-05-comp] | B136443 | 6.00 | $11 / 30 / 15$ |  |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B136443 | 6.00 | 6.00 | $11 / 30 / 15$ |

Prep Method: SW-846 3546-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1264-02 [SB-04-comp] | B136376 | 30.3 | 1.00 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1264-04$ [SB-05-comp] | B136376 | 30.0 | 1.00 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1264-06$ [SB-06-comp] | B136376 | 30.0 | 1.00 | $11 / 28 / 15$ |

Prep Method: SW-846 5035/5030B-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B136786 | 15.5 | 16.7 | $12 / 03 / 15$ |

Prep Method: SW-846 5035/5030B-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-02$ [SB-04-comp] | B136887 | 15.2 | 16.5 | $12 / 04 / 15$ |
| $15 \mathrm{~K} 1264-04$ [SB-05-comp] | B 136887 | 15.9 | 16.4 | $12 / 04 / 15$ |

## Prep Method: SW-846 3546-SW-846 8082A

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1264-02 [SB-04-comp] | B136379 | 10.0 | 10.0 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1264-04$ [SB-05-comp] | B136379 | 10.2 | 10.0 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1264-06$ [SB-06-comp] | B136379 | 10.3 | 10.0 | $11 / 28 / 15$ |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Sample Extraction Data

Prep Method: SW-846 5035-SW-846 8260C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-01[\mathrm{SB}-04-5.5-6]$ | B136588 | 5.00 | 10.0 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1264-03[\mathrm{SB}-05-5.5-6]$ | B 136588 | 5.00 | 10.0 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1264-05[$ SB-06-5.5-6] | B 136588 | 5.00 | 10.0 | $12 / 01 / 15$ |

Prep Method: SW-846 3546-SW-846 8270D

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1264-02 [SB-04-comp] | B136421 | 30.0 | 1.00 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1264-04$ [SB-05-comp] | B136421 | 30.0 | 1.00 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1264-06$ [SB-06-comp] | B136421 | 30.0 | 1.00 | $11 / 30 / 15$ |

SW-846 9014

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-02$ [SB-04-comp] | B136582 | 25.2 | 250 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1264-04$ [SB-05-comp] | B136582 | 25.6 | 250 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B136582 | 25.7 | 250 | $12 / 01 / 15$ |

SW-846 9030A

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1264-02 [SB-04-comp] | B136616 | 25.2 | 250 | $12 / 01 / 15$ |
| 15K1264-04 [SB-05-comp] | B136616 | 25.6 | 250 | $12 / 01 / 15$ |
| 15K 1264-06 [SB-06-comp] | B136616 | 25.7 | 250 | $12 / 01 / 15$ |

SW-846 9045C

| Lab Number [Field ID] | Batch | Initial $[\mathrm{g}]$ | Date |
| :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-02$ [SB-04-comp] | B136471 | 20.0 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-04[\mathrm{SB}-05-\mathrm{comp}]$ | B136471 | 20.0 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B136471 | 20.0 | $11 / 25 / 15$ |

SW-846 9095B

| Lab Number [Field ID] | Batch | lnitial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1264-02$ [SB-04-comp] | B136547 | 100 | 100 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1264-04[S B-05-c o m p]$ | B136547 | 100 | 100 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1264-06[$ SB-06-comp] | B136547 | 100 | 100 | $12 / 01 / 15$ |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 <br> QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |


| Blank (B136588-BLK1) |  |  |  | Prepared \& Analyzed: 12/01/15 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Acrylonitrile | ND | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Benzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromochloromethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromodichloromethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromoform | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Bromomethane | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | L-04 |
| 2-Butanone (MEK) | ND | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Butyl Alcohol (TBA) | ND | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| n -Butylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| sec-Butylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Butylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Carbon Disulfide | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | L-04 |
| Carbon Tetrachloride | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chlorodibromomethane | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chloroethane | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chloroform | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Chloromethane | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | L-04 |
| 2-Chlorotoluene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 4-Chlorotoluene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | V-05 |
| 1,2-Dibromoethane (EDB) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Dibromomethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,3-Dichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,4-Dichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| trans-1,4-Dichloro-2-butene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | V-05 |
| Dichlorodifluoromethane (Freon 12) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  | V-05 |
| 1,1-Dichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,1-Dichloroethylene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| cis-1,2-Dichloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| trans-1,2-Dichloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,2-Dichloropropane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,3-Dichloropropane | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 2,2-Dichloropropane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,1-Dichloropropene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| cis-1,3-Dichloropropene | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| trans-1,3-Dichloropropene | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Diethyl Ether | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Diisopropyl Ether (DIPE) | ND | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 1,4-Dioxane | ND | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Ethylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Hexachlorobutadiene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| 2-Hexanone (MBK) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Isopropylbenzene (Cumene) | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| p-Isopropyltoluene (p-Cymene) | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  |  | Reporting |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136588 - SW-846 5035

| Blank (B136588-BLK1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Naphthalene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| n-Propylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Styrene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,1,1,2-Tetrachloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,1,2,2-Tetrachloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  | , |  | V-05 |  |
| Tetrachloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Tetrahydrofuran | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Toluene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,2,3-Trichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,2,4-Trichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,3,5-Trichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,1,1-Trichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,1,2-Trichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Trichloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Trichlorofluoromethane (Freon 11) | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,2,3-Trichloropropane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,2,4-Trimethylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| 1,3,5-Trimethylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Vinyl Chloride | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| $\mathrm{m}+\mathrm{p}$ Xylene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| o-Xylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0478 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 95.7 |  | 70-130 |  |  |
| Surrogate: Toluene-d8 | 0.0509 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 102 |  | 70-130 |  |  |
| Surrogate: 4-Bromofluorobenzene | 0.0486 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 97.2 |  | 70-130 |  |  |
| LCS (B136588-BS1) |  |  |  | cpared \& | 1/15 |  |  |  |  |
| Acetone | 0.149 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 74.6 |  | 70-160 |  | $\dagger$ |
| Acrylonitrile | 0.0172 | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 85.8 |  | 70-130 |  |  |
| tert-Amyl Methyl Ether (TAME) | 0.0183 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.7 |  | 70-130 |  |  |
| Benzene | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 |  | 70-130 |  |  |
| Bromobenzene | 0.0188 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.9 |  | 70-130 |  |  |
| Bromochloromethane | 0.0192 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.8 |  | 70-130 |  |  |
| Bromodichloromethane | 0.0172 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 85.9 |  | 70-130 |  |  |
| Bromoform | 0.0205 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 |  | 70-130 |  |  |
| Bromomethane | 0.00706 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 35.3 | * | 40-130 | L-04 | $\dagger$ |
| 2-Butanone (MEK) | 0.163 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 81.7 |  | 70-160 |  | $\dagger$ |
| tert-Butyl Alcohol (TBA) | 0.196 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 98.0 |  | 40-130 |  | $\dagger$ |
| n-Butylbenzene | 0.0202 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 |  | 70-130 |  |  |
| sec-Butylbenzene | 0.0207 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 103 |  | 70-130 |  |  |
| tert-Butylbenzene | 0.0198 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 98.8 |  | 70-160 |  | $\dagger$ |
| tert-Butyl Ethyl Ether (TBEE) | 0.0193 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.5 |  | 70-130 |  |  |
| Carbon Disulfide | 0.0123 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 61.5 | * | 70-130 | L-04 |  |
| Carbon Tetrachloride | 0.0166 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.1 |  | 70-130 |  |  |
| Chlorobenzene | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.9 |  | 70-130 |  |  |
| Chlorodibromomethane | 0.0173 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.4 |  | 70-130 |  |  |
| Chloroethane | 0.0191 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.5 |  | 70-130 |  |  |
| Chloroform | 0.0195 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.3 |  | 70-130 |  |  |
| Chloromethane | 0.0123 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 61.4 | * | 70-130 | L-04 |  |
| 2-Chlorotoluene | 0.0196 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.8 |  | 70-130 |  |  |
|  |  |  |  |  |  |  |  | Page 39 |  |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

|  | Result $\begin{array}{r}\text { Reporting } \\ \text { Limit }\end{array}$ |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte |  |  | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136588 - SW-846 5035

| $\frac{\text { LCS (B136588-BS1) }}{\text { 4-Chlorotoluene }}$ | Prepared \& Analyzed 12/01/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0.0191 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.7 | 70-130 |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0163 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 81.4 | 70-130 | V-05 |  |
| 1,2-Dibromoethane (EDB) | 0.0185 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.6 | 70-130 | V-05 |  |
| Dibromomethane | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.8 | 70-130 |  |  |
| 1,2-Dichlorobenzene | 0.0175 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 87.6 | 70-130 |  |  |
| 1,3-Dichlorobenzene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.2 | 70-130 |  |  |
| 1,4-Dichlorobenzene | 0.0178 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.9 | 70-130 |  |  |
| trans-1,4-Dichloro-2-butene | 0.0157 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 78.7 | 70-130 | V-05 |  |
| Dichlorodifluoromethane (Freon 12) | 0.00970 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 48.5 | 40-160 | V-05 |  |
| 1,1-Dichloroethane | 0.0202 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-130 |  |  |
| 1,2-Dichloroethane | 0.0187 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.4 | 70-130 |  |  |
| 1,1-Dichloroethylene | 0.0181 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.5 | 70-130 |  |  |
| cis-1,2-Dichloroethylene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 |  |  |
| trans-1,2-Dichloroethylene | 0.0185 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.5 | 70-130 |  |  |
| 1,2-Dichloropropane | 0.0188 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.9 | 70-130 |  |  |
| 1,3-Dichloropropane | 0.0169 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 84.7 | 70-130 |  |  |
| 2,2-Dichloropropane | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.1 | 70-130 |  |  |
| 1,1-Dichloropropene | 0.0195 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.5 | 70-130 |  |  |
| cis-1,3-Dichloropropene | 0.0162 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 80.9 | 70-130 |  |  |
| trans-1,3-Dichloropropene | 0.0177 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.5 | 70-130 |  |  |
| Diethyl Ether | 0.0184 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.9 | 70-130 |  |  |
| Diisopropyl Ether (DIPE) | 0.0187 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.6 | 70-130 |  |  |
| 1,4-Dioxane | 0.160 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 80.0 | 40-160 |  | $\dagger$ |
| Ethylbenzene | 0.0195 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.6 | 70-130 |  |  |
| Hexachlorobutadiene | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-160 |  |  |
| 2-Hexanone (MBK) | 0.160 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 80.2 | 70-160 |  | $\dagger$ |
| Isopropylbenzene (Cumene) | 0.0199 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 99.7 | 70-130 |  |  |
| p-Isopropyltoluene (p-Cymene) | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 | 70-130 |  |  |
| Methyl tert-Butyl Ether (MTBE) | 0.0183 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.7 | 70-130 |  |  |
| Methylene Chloride | 0.0150 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 75.2 | 40-160 |  | $\dagger$ |
| 4-Methyl-2-pentanone (MIBK) | 0.171 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 85.3 | 70-160 |  | + |
| Naphthalene | 0.0181 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.4 | 40-130 |  | $\dagger$ |
| n-Propylbenzene | 0.0200 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 100 | 70-130 |  |  |
| Styrene | 0.0201 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-130 |  |  |
| 1,1,1,2-Tetrachloroethane | 0.0151 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 75.4 | 70-130 |  |  |
| 1,1,2,2-Tetrachloroethane | 0.0150 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 74.8 | 70-130 | V-05 |  |
| Tetrachloroethylene | 0.0167 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.7 | 70-130 |  |  |
| Tetrahydrofuran | 0.0180 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.0 | 70-130 |  |  |
| Toluene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 |  |  |
| 1,2,3-Trichlorobenzene | 0.0187 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.5 | 70-130 |  |  |
| 1,2,4-Trichlorobenzene | 0.0189 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 94.6 | 70-130 |  |  |
| 1,3,5-Trichlorobenzene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 |  |  |
| 1,1,1-Trichloroethane | 0.0155 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 77.6 | 70-130 |  |  |
| 1,1,2-Trichloroethane | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.3 | 70-130 |  |  |
| Trichloroethylene | 0.0192 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.1 | 70-130 |  |  |
| Trichlorofluoromethane (Freon 11) | 0.0182 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.8 | 70-130 |  |  |
| 1,2,3-Trichloropropane | 0.0161 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 80.5 | 70-130 |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 0.0195 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.5 | 70-130 |  |  |
| 1,2,4-Trimethylbenzene | 0.0194 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.9 |  |  |  |
| 1,3,5-Trimethylbenzene | 0.0208 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 104 | 70-130 |  |  |
| Vinyl Chloride | 0.0149 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 74.4 | 40-130 |  | $\dagger$ |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  |  | Reporting |  | Spike | Source Result | \%REC | \%REC <br> Limits | RPD | RPD Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analy | Result | Limit | Units |  |  | \%REC |  | RPD |  |  |

Batch B136588 - SW-846 5035

| LCS (B136588-BS1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| m +p Xylene | 0.0387 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0400 | 96.9 | 70-130 |
| o-Xylene | 0.0189 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 94.7 | 70-130 |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0491 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 98.2 | 70-130 |
| Surrogate: Toluene-d8 | 0.0507 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 101 | 70-130 |
| Surrogate: 4-Bromofluorobenzene | 0.0492 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 98.5 | 70-130 |


| LCS Dup (B136588-BSD1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0.136 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 67.8 | * 70-160 | 9.56 | 25 | L-07 | $\dagger$ |
| Acetone | 0.136 0.0168 | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.9 | 70-130 | 2.24 | 25 |  |  |
| Acrylonitrile | 0.0168 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.8 | 70-130 | 3.21 | 25 |  |  |
| tert-Amyl Methyl Ether (TAME) | 0.0178 | 0.0020 |  | 0.0200 | 95.7 | 70-130 | 5.88 | 25 |  |  |
| Benzene | 0.0191 | 0.0020 | mg Kg wet |  |  |  | 3.91 | 25 |  |  |
| Bromobenzene | 0.0181 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.3 | 70-130 | 3.91 |  |  |  |
| Bromochloromethane | 0.0180 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.2 | 70-130 | 6.02 | 25 |  |  |
| Bromodichloromethane | 0.0163 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 81.4 | 70-130 | 5.38 | 25 |  |  |
| Bromoform | 0.0200 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 100 | 70-130 | 2.37 | 25 |  |  |
| Bromomethane | 0.00674 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 33.7 | * 40-130 | 4.64 | 25 | L-04 |  |
| 2-Butanone (MEK) | 0.155 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 77.5 | 70-160 | 5.30 | 25 |  | $\dagger$ |
| tert-Butyl Alcohol (TBA) | 0.191 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 95.4 | 40-130 | 2.74 | 25 |  |  |
| n -Butylbenzene | 0.0195 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.5 | 70-130 | 3.63 | 25 |  |  |
| sec-Butylbenzene | 0.0197 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 98.7 | 70-130 | 4.55 | 25 |  |  |
| tert-Butylbenzene | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.1 | 70-160 | 5.94 | 25 |  | $\dagger$ |
| tert-Butyl Ethyl Ether (TBEE) | 0.0183 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.6 | 70-130 | 5.21 | 25 |  |  |
| Carbon Disulfide | 0.0112 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 55.9 | 70-130 | 9.54 | 25 | L-04 |  |
| Carbon Tetrachloride | 0.0157 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 78.4 | 70-130 | 5.82 | 25 |  |  |
| Chlorobenzene | 0.0176 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.2 | 70-130 | 5.19 | 25 |  |  |
| Chlorodibromomethane | 0.0168 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.8 | 70-130 | 3.06 | 25 |  |  |
| Chloroethane | 0.0175 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 87.5 | 70-130 | 8.74 | 25 |  |  |
| Chloroform | 0.0184 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 | 5.60 | 25 |  |  |
| Chloromethane | 0.0111 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 55.7 | * 70-130 | 9.74 | 25 | L-04 |  |
| 2-Chlorotoluene | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.2 | 70-130 | 4.82 | 25 |  |  |
| 4-Chlorotoluene | 0.0183 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.7 | 70-130 | 4.27 | 25 |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0154 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 77.1 | 70-130 | 5.43 | 25 | V-05 |  |
| 1,2-Dibromoethane (EDB) | 0.0182 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.8 | 70-130 | 1.96 | 25 |  |  |
| Dibromomethane | 0.0178 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.0 | 70-130 | 4.18 | 25 |  |  |
| 1,2-Dichlorobenzene | 0.0172 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.0 | 70-130 | 1.84 | 25 |  |  |
| 1,3-Dichlorobenzene | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.5 | 70-130 | 2.97 | 25 |  |  |
| 1,4-Dichlorobenzene | 0.0174 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 87.2 | 70-130 | 1.93 | 25 |  |  |
| trans-1,4-Dichloro-2-butene | 0.0141 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 70.3 | 70-130 | 11.3 | 25 |  |  |
| Dichlorodifluoromethane (Freon 12) | 0.00916 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 45.8 | 40-160 | 5.73 | 25 | V-0s |  |
| 1,1-Dichloroethane | 0.0193 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.5 | 70-130 | 4.46 | 25 |  |  |
| 1,2-Dichloroethane | 0.0181 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.5 | 70-130 | 3.15 | 25 |  |  |
| 1,1-Dichloroethylene | 0.0169 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 84.5 | 70-130 | 6.86 | 25 |  |  |
| cis-1,2-Dichloroethylene | 0.0174 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.9 | 70-130 | 5.70 | 25 |  |  |
| trans-1,2-Dichloroethylene | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.5 | 70-130 | 3.30 | 25 |  |  |
| 1,2-Dichloropropane | 0.0178 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.1 | 70-130 | 5.25 | 25 |  |  |
| 1,3-Dichloropropane | 0.0165 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 82.3 | 70-130 | 2.87 | 25 |  |  |
| 2,2-Dichloropropane | 0.0173 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.5 | 70-130 | 6.27 | 25 |  |  |
| 1,1-Dichloropropene | 0.0185 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.3 | 70-130 | 5.48 | 25 |  |  |
| cis-1,3-Dichloropropene | 0.0154 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 77.1 | 70-130 | 4.81 | 25 |  |  |
| trans-1,3-Dichloropropene | 0.0171 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 85.6 | 70-130 | 3.33 | 25 |  |  |
| Diethyl Ether | 0.0172 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.1 | 70-130 | 6.52 | 25 |  |  |
| Diisopropyl Ether (DIPE) | 0.0181 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.6 | 70-130 | 3.26 | 25 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | $\begin{aligned} & \text { RPD } \\ & \text { Limit } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Batch B136588 - SW-846 5035 |  |  |  |  |  |  |  |  |  |  |
| LCS Dup (B136588-BSD1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| 1,4-Dioxane | 0.172 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 |  | 85.8 | 40-160 | 7.02 | 50 |  |
| Ethylbenzene | 0.0188 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 93.8 | 70-130 | 3.97 | 25 |  |
| Hexachlorobutadiene | 0.0193 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 96.4 | 70-160 | 4.96 | 25 |  |
| 2-Hexanone (MBK) | 0.155 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 |  | 77.4 | 70-160 | 3.64 | 25 |  |
| Isopropylbenzene (Cumene) | 0.0192 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 96.0 | 70-130 | 3.78 | 25 |  |
| p-Isopropyltoluene ( p -Cymene) | 0.0196 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 97.9 | 70-130 | 3.81 | 25 |  |
| Methyl tert-Butyl Ether (MTBE) | 0.0174 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 86.9 | 70-130 | 5.38 | 25 |  |
| Methylene Chloride | 0.0145 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 72.3 | 40-160 | 3.93 | 25 |  |
| 4-Methyl-2-pentanone (MIBK) | 0.167 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 |  | 83.4 | 70-160 | 2.30 | 25 |  |
| Naphthalene | 0.0174 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 86.8 | 40-130 | 4.06 | 25 |  |
| n-Propylbenzene | 0.0191 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 95.3 | 70-130 | 5.01 | 25 |  |
| Styrene | 0.0190 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 95.2 | 70-130 | 5.52 | 25 |  |
| 1,1,1,2-Tetrachioroethane | 0.0145 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 72.7 | 70-130 | 3.65 | 25 |  |
| 1,1,2,2-Tetrachloroethane | 0.0143 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 71.4 | 70-130 | 4.65 | 25 | V-05 |
| Tetrachloroethylene | 0.0159 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 79.4 | 70-130 | 5.27 | 25 |  |
| Tetrahydrofuran | 0.0172 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 86.0 | 70-130 | 4.55 | 25 |  |
| Toluene | 0.0176 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 88.2 | 70-130 | 4.22 | 25 |  |
| 1,2,3-Trichlorobenzene | 0.0181 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 90.7 | 70-130 | 3.04 | 25 |  |
| 1,2,4-Trichlorobenzene | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 89.5 | 70-130 | 5.54 | 25 |  |
| 1,3,5-Trichlorobenzene | 0.0176 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 87.8 | 70-130 | 4.67 | 25 |  |
| 1,1,1-Trichloroethane | 0.0146 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 72.9 | 70-130 | 6.25 | 25 |  |
| 1,1,2-Trichloroethane | 0.0171 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 85.6 | 70-130 | 4.23 | 25 |  |
| Trichloroethylene | 0.0188 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 93.8 | 70-130 | 2.42 | 25 |  |
| Trichlorofluoromethane (Freon 11) | 0.0165 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 82.7 | 70-130 | 9.34 | 25 |  |
| 1,2,3-Trichloropropane | 0.0160 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 80.1 | 70-130 | 0.498 | 25 |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 0.0187 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 93.4 | 70-130 | 4.30 | 25 |  |
| 1,2,4-Trimethylbenzene | 0.0185 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 92.5 | 70-130 | 4.65 | 25 |  |
| 1,3,5-Trimethylbenzene | 0.0199 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 99.4 | 70-130 | 4.43 | 25 |  |
| Vinyl Chloride | 0.0137 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 68.6 | 40-130 | 8.11 | 25 |  |
| m +p Xylene | 0.0373 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0400 |  | 93.3 | 70-130 | 3.79 | 25 |  |
| o-Xylene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 |  | 92.0 | 70-130 | 2.89 | 25 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0484 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 |  | 96.8 | 70-130 |  |  |  |
| Surrogate: Toluene-d8 | 0.0512 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 |  | 102 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 0.0496 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 |  | 99.2 | 70-130 |  |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control


Batch B136421 - SW-846 3546

| Blank (B136421-BLK1) | .. Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Acenaphthylene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Anthracene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(a)anthracene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(a)pyrene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(b)fluoranthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(g,h,i)perylene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Benzo(k)fluoranthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Chrysene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Dibenz(a,h)anthracene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Fluoranthene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Fluorene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Indeno(1,2,3-cd)pyrene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| 2-Methylnaphthalene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Naphthalene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Phenanthrene | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Pyrenc | ND | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Surrogate: Nitrobenzene-d5 | 3.55 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 106 | 30-130 |  |
| Surrogate: 2-Fluorobiphenyl | 3.21 |  | $\mathrm{mg} / \mathrm{Kg}$ wet |  | 96.2 |  |  |
| Surrogate: p-Terphenyl-d14 | 3.52 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 106 | 30-130 |  |
| LCS (B136421-BS1) |  |  |  | pared: | ed: 12/ |  |  |
| Acenaphthene | 1.58 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.9 | 40-140 |  |
| Acenaphthylene | 1.58 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.8 | 40-140 |  |
| Anthracene | 1.59 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 95.2 | 40-140 |  |
| Benzo(a)anthracene | 1.60 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 95.9 | 40-140 |  |
| Benzo(a)pyrene | 1.60 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 96.1 | 40-140 |  |
| Benzo(b)fluoranthene | 1.55 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 93.1 | 40-140 |  |
| Benzo(g,h,i)perylene | 1.48 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 89.0 | 40-140 |  |
| Benzo(k)fluoranthene | 1.54 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 92.5 | 40-140 |  |
| Chrysene | 1.63 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 97.9 | 40-140 |  |
| Dibenz(a,h)anthracene | 1.58 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.8 | 40-140 |  |
| Fluoranthene | 1.62 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 97.5 | 40-140 |  |
| Fluorene | 1.64 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 98.4 | 40-140 |  |
| Indeno(1,2,3-cd)pyrene | 1.56 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 93.7 | 40-140 |  |
| 2-Methylnaphthalene | 1.61 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 96.4 | 40-140 |  |
| Naphthalene | 1.51 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.8 | 40-140 |  |
| Phenanthrene | 1.57 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.0 | 40-140 |  |
| Pyrene | 1.59 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 95.4 | 40-140 |  |
| Surrogate: Nitrobenzene-d5 | 3.79 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 114 | 30-130 |  |
| Surrogate: 2-Fluorobiphenyl | 3.44 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 103 | 30-130 |  |
| Surrogate: p-Terphenyl-d14 | 3.68 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 110 | 30-130 |  |

PROJECT ID: HWR100PAD

# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 <br> QUALTY CONTROL 

Semivolatile Organic Compounds by GC/MS - Quality Control

| Analyte |  | Reporting <br> Limit |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

## Batch B136421 - SW-846 3546

| LCS Dup (B136421-BSD1) | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | 1.51 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.7 | 40-140 | 4.48 | 30 |
| Acenaphthylene | 1.52 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 91.1 | 40-140 | 4.04 | 30 |
| Anthracene | 1.48 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 89.0 | 40-140 | 6.73 | 30 |
| Benzo(a)anthracene | 1.51 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.4 | 40-140 | 5.99 | 30 |
| Benzo(a)pyrene | 1.54 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 92.5 | 40-140 | 3.90 | 30 |
| Benzo(b)fluoranthene | 1.52 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.9 | 40-140 | 2.39 | 30 |
| Benzo(g,h,i)perylene | 1.38 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 82.9 | 40-140 | 7.10 | 30 |
| Benzo(k)fluoranthene | 1.50 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 89.9 | 40-140 | 2.94 | 30 |
| Chrysene | 1.50 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.3 | 40-140 | 8.10 | 30 |
| Dibenz(a,h)anthracene | 1.44 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 86.5 | 40-140 | 9.11 | 30 |
| Fluoranthene | 1.48 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 88.7 | 40-140 | 9.50 | 30 |
| Fluorene | 1.53 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 91.7 | 40-140 | 7.09 | 30 |
| Indeno(1,2,3-cd)pyrene | 1.44 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 86.2 | 40-140 | 8.31 | 30 |
| 2-Methylnaphthalene | 1.49 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 89.6 | 40-140 | 7.29 | 30 |
| Naphthalene | 1.45 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 86.8 | 40-140 | 4.55 | 30 |
| Phenanthrene | 1.50 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.2 | 40-140 | 4.13 | 30 |
| Pyrene | 1.49 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 89.2 | 40-140 | 6.80 | 30 |
| Surrogate: Nitrobenzene-d5 | 3.64 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 109 | 30-130 |  |  |
| Surrogate: 2-Fluorobiphenyl | 3.30 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 99.0 | 30-130 |  |  |
| Surrogate: p-Terphenyl-d14 | 3.41 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 102 | 30-130 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control


Batch B136379 - SW-846 3546


## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |


| Matrix Spike (B136379-MS1) | Source: 15K1264-02 |  |  | Prepared: 11/28/15 Analyzed: 12/03/15 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 | 0.27 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 | ND | 122 | 40-140 |  |
| Aroclor-1016 [2C] | 0.28 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 | ND | 125 | 40-140 |  |
| Aroclor-1260 | 0.22 | 0.11 | mg/Kg dry | 0.220 | ND | 102 | 40-140 |  |
| Aroclor-1260 [2C] | 0.25 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 | ND | 112 | 40-140 |  |
| Surrogate: Decachlorobiphenyl | 0.245 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 |  | 111 | 30-150 |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.220 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 |  | 100 | 30-150 |  |
| Surrogate: Tetrachloro-m-xylene | 0.232 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 |  | 105 | 30-150 | , |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.230 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.220 |  | 104 | 30-150 |  |


| Matrix Spike Dup (B136379-MSD1) | Source: 15K1264-02 |  |  | Prepared: 11/28/15 Analyzed: 12/03/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 | 0.27 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 | ND | 123 | 40-140 | 0.337 | 30 |
| Aroclor-1016 [2C] | 0.28 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 | ND | 126 | 40-140 | 0.293 | 30 |
| Aroclor-1260 | 0.22 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 | ND | 102 | 40-140 | 0.941 | 30 |
| Aroclor-1260[2C] | 0.25 | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 | ND | 112 | 40-140 | 0.903 | 30 |
| Surrogate: Decachlorobiphenyl | 0.243 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 |  | 111 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.219 |  | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 0.218 |  | 100 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.230 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 |  | 105 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.226 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 0.218 |  | 104 | 30-150 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Petroleum Hydrocarbons Analyses - Quality Control


Batch B136376 - SW-846 3546

| Blank (B136376-BLK1) | Prepared: 11/28/15 Analyzed: 11/29/15* |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diesel Range Organics | ND | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Surrogate: 0-Terphenyl | 1.71 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 51.4 | 40-140 |  |
| LCS (B136376-BS1) | Prepared: 11/28/15 Analyzed: 11/29/15 |  |  |  |  |  |  |
| Diesel Range Organics | 23.2 | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet | 33.3 | 69.7 | 40-140 |  |
| Surrogate: o-Terphenyl | 2.29 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 68.8 | 40-140 |  |
| LCS Dup (B136376-BSD1) | Prepared: 11/28/15 Analyzed: 11/29/15 |  |  |  |  |  |  |
| Diesel Range Organics | 21.4 | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet | 33.3 | 64.3 | 40-140 | 8.02 |
| Surrogate: o-Terphenyl | 2.15 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 64.5 | 40-140 |  |


| Matrix Spike (B136376-MS1) | Source: 15K1264-04 |  |  | Prepared: 11/28/15 Analyzed: 12/02/15 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diesel Range Organics | 40.9 | 9.0 | $\mathrm{mg} / \mathrm{Kg}$ dry | 36.2 | 11.9 | 80.1 | 40-140 |
| Surrogate: o-Terphenyl | 3.17 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 3.62 |  | 87.5 | 40-140 |


| Matrix Spike Dup (B136376-MSD1) | Source: 15K1264-04 |  |  | Prepared: 11/28/15 Analyzed: 12/02/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diesel Range Organics | 42.1 | 9.1 | $\mathrm{mg} / \mathrm{Kg}$ dry | 36.5 | 11.9 | 82.6 | 40-140 | 2.92 | 30 |
| Surrogate: o-Terphenyl | 3.19 |  | $\mathrm{mg} / \mathrm{Kg}$ dry | 3.65 |  | 87.2 | 40-140 |  |  |




| Blank (B136887-BLK1) | Prepared \& Analyzed: 12/04/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | $1.0 \mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0157 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 105 | 70-130 |
| LCS (B136887-BS1) |  |  |  | epared \& |  |  |
| Gasoline Range Organics (GRO) | 0.238 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 95.1 | 80-120 |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0156 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 104 | 70-130 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

| A | Reporting |  |  | Spike | Source |  | \%REC |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analy | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |


| LCS Dup (B136887-BSD1) | Prepared \& Analyzed: 12/04/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) |  |  |  |  |  |  |  |  |
| Surrogate: 1-Chloro-3-fluorobenzan | 0.235 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 94.1 | 80-120 | 1.10 | 30 |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0162 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 108 | 70-130 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## QUALITY CONTROL



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

| Analyte | Result | Reporting $\qquad$ | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Batch B136443-SW-846 7 |  |  |  |  |  |  |  |  |  |  |
| Blank (B136443-BLK1) |  |  |  | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |
| Mercury | ND | 0.00010 | $\mathrm{mg} / \mathrm{L}$ |  |  |  |  |  |  |  |
| LCS (B136443-BS1) | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| Mercury | 0.00203 | 0.00010 | mg/L | 0.00200 |  | 101 | 80-120 |  |  |  |
| LCS Dup (B136443-BSD1) | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| Mercury | 0.00198 | 0.00010 | mg/L | 0.00200 |  | 99.2 | 80-120 | 2.23 | 20 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405. * TEL. 413/525-2332

## FLAG/QUALIFIER SUMMARY

QC result is outside of established limits.
Wide recovery limits established for difficult compound.
Wide RPD limits established for difficult compound.
Data exceeded client recommended or regulatory level
Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
No results have been blank subtracted unless specified in the case narrative section.
Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
Sample preserved in the laboratory, not in the field as required by the method.
According to the NY ELAP program, all voa results less than $0.2 \mathrm{mg} / \mathrm{Kg}$ are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.
Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

## Certified Analyses included in this Report

Analyte Certifications

SW-846 1030 in Soil
Ignitability
SW-846 6010C in Water
Arseric
Barium
Cadmium
Chromium
Lead
Selenium
Silver
SW-846 7470A in Water
Mercury
SW-846 8015C in Soil
Gasoline Range Organics (GRO)
Diesel Range Organics
SW-846 8082A in Soil
Aroclor-1016
Aroclor-1016 [2C]
Aroclor-1221
Aroclor-1221 [2C]
Aroclor-1232
Aroclor-1232 [2C]
Aroclor-1242
Aroclor-1242 [2C]
Aroclor-1248
Aroclor-1248 [2C]
Aroclor-1254
Aroclor-1254 [2C]
Aroclor- 1260
Aroclor-1260 [2C]
Aroclor-1262
Aroclor-1262 [2C]
Aroclor-1268
Aroclor-1268 [2C]
SW-846 8260C in Soil

## Acetone

Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
2-Butanone (MEK)
n-Butylbenzene
sec-Butylbenzene

NY,NH,CT,NC,ME,VA

NY,CT,NC,ME,NH,VA
NY,CT,ME,NC,NH,VA
NY,CT,ME,NC,NH,VA
NY,CT,ME,NC,NH,VA
NY,CT,ME,NC,NH,VA
CT,ME,NC,NH,NY,VA
CT,ME,NC,NH,NY,VA

CT,ME,NC,NH,NY,VA

NY,VA,NH
NY,VA,NH

CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
NY,NC
NY,NC
NY,NC
NY,NC

CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
NH,NY,ME,VA
NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
CERTIFICATIONS

## Certified Analyses included in this Report

Analyte
Certifications

SW-846 8260C in Soil

| tert-Butylbenzene | CT,NH,NY,ME,VA |
| :---: | :---: |
| Carbon Disulfide | CT,NH,NY,ME,VA |
| Carbon Tetrachloride | CT,NH,NY, ME,VA |
| Chlorobenzene | CT,NH,NY,ME,VA |
| Chlorodibromomethane | CT,NH,NY,ME,VA |
| Chloroethane | CT,NH,NY,ME,VA |
| Chloroform | CT,NH,NY,ME,VA |
| Chloromethane | CT,NH,NY,ME,VA |
| 2-Chlorotoluene | CT,NH,NY,ME,VA |
| 4-Chlorotoluene | CT,NH,NY,ME,VA |
| Dibromomethane | NH,NY,ME,VA |
| 1,2-Dichlorobenzene | CT,NH,NY,ME,VA |
| 1,3-Dichlorobenzene | CT,NH,NY,ME,VA |
| 1,4-Dichlorobenzene | CT,NH,NY,ME,VA |
| Dichlorodifluoromethane (Freon 12) | NH,NY,ME,VA |
| 1,1-Dichloroethane | CT,NH,NY,ME,VA |
| 1,2-Dichloroethane | CT,NH,NY,ME,VA |
| 1,1-Dichloroethylene | CT,NH,NY,ME,VA |
| cis-1,2-Dichloroethylene | CT,NH,NY,ME,VA |
| trans-1,2-Dichloroethylene | CT,NH,NY,ME,VA |
| 1,2-Dichloropropane | CT,NH,NY,ME,VA |
| 1,3-Dichloropropane | NH,NY,ME,VA |
| 2,2-Dichloropropane | NH,NY,ME, VA |
| 1,1-Dichloropropene | NH,NY,ME,VA |
| cis-1,3-Dichloropropene | CT,NH,NY,ME,VA |
| trans-1,3-Dichloropropene | CT,NH,NY,ME,VA |
| Ethylbenzene | CT,NH,NY,ME,VA |
| Hexachlorobutadiene | NH,NY,ME,VA |
| 2-Hexanone (MBK) | CT,NH,NY,ME,VA |
| Isopropylbenzene (Cumene) | CT,NH,NY,ME,VA |
| p-Isopropyltoluene (p-Cymene) | NH,NY |
| Methyl tert-Butyl Ether (MTBE) | NY,VA |
| Methylene Chloride | CT,NH,NY,ME,VA |
| 4-Methyl-2-pentanone (MIBK) | CT,NH,NY,VA |
| Naphthalene | NH,NY,ME,VA |
| $n$-Propylbenzene | NH,NY |
| Styrene | CT,NH,NY,ME,VA |
| 1,1,1,2-Tetrachloroethane | CT,NH,NY,ME,VA |
| 1,1,2,2-Tetrachloroethane | CT,NH,NY,ME,VA |
| Tetrachloroethylene | CT,NH,NY,ME,VA |
| Toluene | CT,NH,NY,ME,VA |
| 1,2,3-Trichlorobenzene | ME |
| 1,2,4-Trichlorobenzene | NH,NY,ME, VA |
| 1,3,5-Trichlorobenzene | ME |
| 1,1,1-Trichloroethane | CT,NH,NY,ME,VA |
| 1,1,2-Trichloroethane | CT,NH,NY,ME,VA |
| Trichloroethylene | CT,NH,NY,ME,VA |

Page 53 of 57

Certified Analyses included in this Report

| Analyte | Certifications |
| :---: | :---: |
| SW-846 8260C in Soil |  |
| Trichlorofluoromethane (Freon 11) | CT,NH,NY,ME,VA |
| 1,2,3-Trichloropropane | NH,NY,ME,VA |
| 1,2,4-Trimethylbenzene | CT,NH,NY,ME, VA |
| 1,3,5-Trimethylbenzene | CT,NH,NY,ME,VA |
| Vinyl Chloride | CT,NH,NY,ME,VA |
| m+p Xylene | CT,NH,NY,ME,VA |
| 0 -Xylene | CT,NH,NY,ME,VA |
| SW-846 8270D in Soil |  |
| Acenaphthene | CT,NY,NH,ME,NC,VA |
| Acenaphthylene | CT,NY,NH,ME,NC,VA |
| Anthracene | CT,NY,NH,ME,NC,VA |
| Benzo(a)anthracene | CT,NY,NH,ME,NC,VA |
| Benzo(a)pyrene | CT,NY,NH,ME,NC,VA |
| Benzo(b)fluoranthene | CT,NY,NH,ME,NC,VA |
| Benzo(g,h,i)perylene | CT,NY,NH,ME,NC,VA |
| Benzo(k)fluoranthene | CT,NY,NH,ME,NC,VA |
| Chrysene | CT,NY,NH,ME,NC,VA |
| Dibenz( $\mathrm{a}, \mathrm{h}$ ) anthracene | CT,NY,NH,ME,NC,VA |
| Fluoranthene | CT,NY,NH,ME,NC,VA |
| Fluorene | CT,NY,NH,ME,NC,VA |
| Indeno(1,2,3-cd)pyrene | CT,NY,NH,ME,NC,VA |
| 2-Methylnaphthalene | CT,NY,NH,ME,NC,VA |
| Naphthalene | CT,NY,NH,ME,NC,VA |
| Phenanthrene | CT,NY,NH,ME,NC,VA |
| Pyrene | CT,NY,NH,ME,NC,VA |

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

| Code | Description | Number | Expires |
| :--- | :--- | :--- | :---: |
| AIHA | AIHA-LAP, LLC | 100033 | $02 / 1 / 2016$ |
| MA | Massachusetts DEP | M-MA100 | $06 / 30 / 2016$ |
| CT | Connecticut Department of Publilc Health | PH-0567 | $09 / 30 / 2017$ |
| NY | New York State Department of Health | 10899 NELAP | $04 / 1 / 2016$ |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | $02 / 5 / 2016$ |
| RI | Rhode Island Department of Health | LAO00112 | $12 / 30 / 2015$ |
| NC | North Carolina Div. of Water Quality | 652 | $12 / 31 / 2015$ |
| NJ | New Jersey DEP | MA007 NELAP | $06 / 30 / 2016$ |
| FL | Florida Department of Health | E871027 NELAP | $06 / 30 / 2016$ |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | $07 / 30 / 2016$ |
| WA | State of Washington Department of Ecology | C2065 | 2011028 |
| ME | State of Maine | 460217 | $02 / 23 / 2016$ |
| VA | Commonwealth of Virginia | 2557 NELAP | $06 / 9 / 2017$ |
| NH-P | New Hampshire Environmental Lab |  | $12 / 14 / 2015$ |
|  |  | $09 / 6 / 2016$ |  |


$\mathrm{s}=$ summa can
tatedlarbag
$0=$ Other
"preservation,
$1=$ led,


apejnsıq un! pos = 8
$X=N a h y d r o x i d e$
$T=N a t h i o s u f f a t e$
$\mathrm{T}=$ Na thiosulfate,
$\mathrm{O}=$ Other,
$\frac{\text { Matin Code, }}{\mathbf{G W}=\text { groundwater }}$

DW= drinking water
$s=$ soil/solia
$\mathrm{SL}=$ sludge

## 




30 ب28 ${ }^{3} \mathrm{HFA}$

80978

.5 On
epode excel obis
O OTHER
10 "Enhanced Data Package"

zecz-szs-\& $\downarrow$ :auoud
$\rightarrow$ AR Email: info@contestlabs.cam www.contestlabs.com
Company Name: LiDO EnQaOPPR, IIAC Client PO\# bax
Project Location: Hey tan Blvd Seavenu Ave, Stowanfax\#

गT HT ANALYTICAL LABORATORY www.contestiabs.com
Address: 703 a omer street Brooklyn, NY IIZII
Project Proposal Provided? (for billing purposes)
O yes proposal date
Con-Test Lab ID $\quad$ Client Sample ID / Description $\begin{aligned} & \text { Beaming } \\ & \text { Date/time }\end{aligned}$
use the following codes to let ConTest know if a specific sample
may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown
O RCP Analysis Certification Form Required
 \&ide
ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT
please be careful not to contaminate this document
hipletely or is incorrect, turnaround time will not start until all questions are answered.

| $x$ |  |
| :---: | :---: |
| $x$ |  |


| 1 |
| :--- |
| $\times$ |
| $\times$ |


$\square^{+} 24-\mathrm{Hr} \square^{\dagger} 48-\mathrm{Hr}$
$\square^{\dagger} 72-\mathrm{Hr} \square^{\dagger} 4$ -

A. Other soupy

Other: O | ㅁ. | Day |
| :--- | :--- |
| D. | Other | Ibberatary use only)

- 0



Comments:

O MCP Analytical Certification Form Required
is your project MCP or RCP?
T


Page 2 of 2
Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client


December 7, 2015

## Amy Hewson

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, NY 14209-2202

Project Location: Hylan Blvd/Mallory Ave. Staten Island
Client Job Number:
Project Number: 15-008-0265/10779
Laboratory Work Order Number: 15K1266

Enclosed are results of analyses for samples received by the laboratory on November 25, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,


Aaron L. Benoit
Project Manager

## Table of Contents

Sample Summary ..... 4
Case Narrative ..... 6
Sample Results ..... 9
15K1266-01 ..... 9
15K1266-02 ..... 12
15K1266-03 ..... 18
15K1266-04 ..... 21
15K1266-05 ..... 27
15K1266-06 ..... 30
Sample Preparation Information ..... 36
QC Data ..... 38
Volatile Organic Compounds by GC/MS ..... 38
B136588 ..... 38
Semivolatile Organic Compounds by GC/MS ..... 43
B136380 ..... 43
Polychlorinated Biphenyls By GC/ECD ..... 45
B136379 ..... 45
Petroleum Hydrocarbons Analyses ..... 46
B136376 ..... 46
B136887 ..... 46
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) ..... 47
B136582 ..... 47
B136616 ..... 47
B136681 ..... 47
TCLP - Metals Analyses ..... 48

## Table of Contents (continued)

B136443 48
Dual Column RPD Report 49
Flag/Qualifier Summary 51
Certifications 52
Chain of Custody/Sample Receipt 55

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

| LiRo Engineers, Inc. |  |
| :--- | :--- |
| 690 Delaware Avenue |  |
| Buffalo, NY 14209-2202 | PURCHASE ORDER NUMBER: |
| ATTN: Amy Hewson |  |
|  | PROJECT NUMBER: $15-008-0265 / 10779$ |

## ANALYTICAL SUMMARY

## WORK ORDER NUMBER; 15K1266

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Hylan Blvd/Mallory Ave. Staten Island
;

| FIELD SAMPLE\# | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SB-07-5.5-6 | 15K 1266-01 | Soil |  | SM 2540G |  |
|  |  |  |  | SW-846 8260C |  |
| SB-07-comp | 15K1266-02 | Soil |  | SM 2540G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-8469014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |
| SB-08-5.5-6 | 15K1266-03 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 8260C |  |
| SB-08-comp | 15K1266-04 | Soil |  | SM 2540 G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-846 9014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |
| SB-09-5.5-6 | 15K1266-05 | Soil |  | SM 2540G <br> SW-846 8260C |  |

LiRo Engineers, Inc 690 Delaware Avenue Buffalo, NY 14209-2202

ATTN: Amy Hewson

REPORT DATE: $12 / 7 / 2015$
PURCHASE ORDER NUMBER:

PROJECT NUMBER: $\quad 15-008-0265 / 10779$

## ANALYTICAL SUMMARY

$$
\text { WORK ORDER NUMBER: } \quad 15 \mathrm{~K} 1266
$$

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.
PROJECT LOCATION: Hylan Blvd/Mallory Ave. Staten Island

| FIELD SAMPLE \# | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SB-09-comp | 15K1266-06 | Soil |  | SM 2540G |  |
|  |  |  |  | SW-846 1030 |  |
|  |  |  |  | SW-846 1311 |  |
|  |  |  |  | SW-846 6010C | MA M-CT007/CT <br> PH-0618/NY11301 |
|  |  |  |  | SW-846 7470A |  |
|  |  |  |  | SW-846 8015C |  |
|  |  |  |  | SW-846 8082A |  |
|  |  |  |  | SW-846 8270D |  |
|  |  |  |  | SW-8469014 |  |
|  |  |  |  | SW-846 9030A |  |
|  |  |  |  | SW-846 9045C |  |
|  |  |  |  | SW-846 9095B |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## CASE NARRATIVE SUMMARY

[^19]
# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 SW-846 8015C 

Qualifications:
PR-03
Sample preserved in the laboratory, not in the field as required by the method.

## Analyte \& Samples(s) Qualified:

15K1266-02[SB-07-comp], 15K1266-04[SB-08-comp], 15K1266-06[SB-09-comp]
SW-846 8260C

## Qualifications:

L-04
Laboratory fortified blank/aboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
Analyte \& Samples(s) Qualified:
Bromomethane
15K1266-01[SB-07-5.5-6], 15K 1266-03[SB-08-5.5-6], 15K1266-05[SB-09-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
Carbon Disulfide
15K1266-01[SB-07-5.5-6], 15K 1266-03[SB-08-5.5-6], 15K1266-05[SB-09-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
Chloromethane
15K1266-01[SB-07-5.5-6], 15K1266-03[SB-08-5.5-6], 15K1266-05[SB-09-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
L-07
Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD
between the two LFB/LCS results is within method specified criteria.
Analyte \& Samples(s) Qualified:
Acetone
B136588-BSD1

## PR-03

Sample preserved in the laboratory, not in the field as required by the method.
Analyte \& Samples(s) Qualified:
$15 \mathrm{~K} 1266-01$ [SB-07-5.5-6], 15K $1266-03$ [SB-08-5.5-6], $15 \mathrm{~K} 1266-05[\mathrm{SB}-09-5.5-6]$

## PR-15

According to the NY ELAP program, all voa results less than $0.2 \mathrm{mg} / \mathrm{Kg}$ are estimated and biased low if not collected according to SW-846
5035-L/5035A-L.
Analyte \& Samples(s) Qualified:
$15 \mathrm{~K} 1266-01$ [SB-07-5.5-6], $15 \mathrm{~K} 1266-03[\mathrm{SB}-08-5.5-6], 15 \mathrm{~K} 1266-05$ [SB-09-5.5-6]

## V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
Analyte \& Samples(s) Qualified:
1,1,2,2-Tetrachloroethane
15K1266-01[SB-07-5.5-6], 15K1266-03[SB-08-5.5-6], 15K1266-05[SB-09-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
1,2-Dibromo-3-chloropropane (DB
15K1266-01[SB-07-5.5-6], 15K1266-03[SB-08-5.5-6], 15K 1266-05[SB-09-5.5-6], B136588-BLK1, B136588-BSI, B136588-BSD1
Dichlorodifluoromethane (Freon 1:
$15 \mathrm{~K} 1266-01$ [SB-07-5.5-6], $15 \mathrm{~K} 1266-03[\mathrm{SB}-08-5.5-6]$, 15K 1266-05[SB-09-5.5-6], B136588-BLK1, B136588-BS1, B136588-BSD1
trans-1,4-Dichloro-2-butene
15K1266-01[SB-07-5.5-6], 15K 1266-03[SB-08-5.5-6], 15K1266-05[SB-09-5.5-6]. B136588-BLK1, B136588-BS1, B136588-BSD1
Z-01
Acetone is a common laboratory contaminant

## Analyte \& Samples(s) Qualified:

Acetone
15K1266-03[SB-08-5.5-6]

## Qualifications:

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
S-07
One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are $>10 \%$.
Analyte \& Samples(s) Qualified:
p-Terphenyl-d14
B136380-BLK1, B136380-BSD1

## SW-846 9045C

## Qualifications:

H-03

## Sample received after recommended holding time was exceeded

## Analyte \& Samples(s) Qualified:

pH
15K 1266-02[SB-07-comp], 15K1266-04[SB-08-comp], 15K1266-06[SB-09-comp]

## SW-846 8015C

Gasoline Range Organics (2-Methylpentane through 1,2,4-Trimethylbenzene) is quantitated against a calibration made with an unleaded gasoline composite standard. Diesel Range Organics (C10-C28) is quantitated against a calibration made with a \#2 fuel oil standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.


Johanna K. Harrington
Manager, Laboratory Reporting

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description: Work Order: 15K 1266

Date Received: 11/25/2015
Field Sample \#: SB-07-5.5-6 Sampled: 11/23/2015 23:00
Samole ID: 15K1266-01
Sample Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Acrylonitrile | ND | 0.0070 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Benzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Bromobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Bromochloromethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 | ; | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Bromodichloromethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Bromoform | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Bromomethane | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 2-Butanone (MEK) | ND | 0.046 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| n-Butylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| sec-Butylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| tert-Butylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Carbon Disulfide | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Carbon Tetrachloride | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Chlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Chlorodibromomethane | ND | 0.0012 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Chloroethane | ND | 0.023 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Chloroform | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Chloromethane | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 2-Chlorotoluene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 4-Chlorotoluene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Dibromomethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V -05 | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,1-Dichloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,2-Dichloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,1-Dichloroethylene | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,2-Dichloropropane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,3-Dichloropropane | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 2,2-Dichloropropane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| 1,1-Dichloropropene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| trans-1,3-Dichloropropene | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
| Diethyl Ether | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 11:38 | MFF |
|  |  |  |  |  |  |  |  | Page 9 of | 57 |



# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 

Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-07-5.5-6 Sampled: 11/23/2015 23:00
Sample ID: 15K1266-01
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is
Sample Description:
Work Order: 15K1266
Date Received: 11/25/2015
Field Sample \#: SB-07-comp Sampled: 11/23/2015 23:00
Sample ID: 15K1266-02
Sample Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Acenaphthylene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Benzo(a)anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Benzo(a)pyrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Benzo(b)fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Benzo(g,h,i)perylene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Benzo(k)fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Chrysene | ND | 0.20 | mg/Kg dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Dibenz(a,h)anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Fluorene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Indeno(1,2,3-cd)pyrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| 2-Methylnaphthalene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Naphthalene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Phenanthrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Pyrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/1/15 22:15 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 93.6 | 30-130 |  |  |  |  | 12/1/15 22:15 |  |
| 2-Fluorobiphenyl |  | 98.8 | 30-130 |  |  |  |  | 12/1/15 22:15 |  |
| p-Terphenyl-d14 |  | 114 | 30-130 |  |  |  |  | 12/1/15 22:15 |  |

# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 

Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15K 1266
Date Received: 11/25/2015
Field Sample \#: SB-07-comp Sampled: 11/23/2015 23:00
Samule 1D: 15K1266-02
Sample Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1221 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kgg}_{\mathrm{g}} \mathrm{y}$ | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1232 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1242 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1248 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1254 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1260 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1262 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Aroclor-1268 [1] | ND | 0.11 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:45 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 105 | 30-150 |  |  |  |  | 12/3/15 2:45 |  |
| Decachlorobiphenyl [2] |  | 94.9 | 30-150 |  |  |  |  | 12/3/15 2:45 |  |
| Tetrachloro-m-xylene [1] |  | 95.4 | 30-150 |  |  |  |  | 12/3/15 2:45 |  |
| Tetrachloro-m-xylene [2] |  | 94.1 | 30-150 |  |  |  |  | 12/3/15 2:45 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-07-comp Sampled: 11/23/2015 23:00
Sample ID: 15K1266-02
Sample Matrix: Soil
Sample Flags: PR-03 Petroleum Hydrocarbons Analyses

| Anaiyte | Results | RL | Units | Dilution | Flag/Qual | Method | $\begin{gathered} \text { Date } \\ \text { Prepared } \end{gathered}$ | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 1.3 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 12/4/15 | 12/4/15 23:38 | EEH |
| Diesel Range Organics | 13 | 9.5 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/28/15 | 12/3/15 5:46 | SCS |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1-Chloro-3-fluorobenzene o-Terphenyl |  | 109 85.5 | $70-130$ $40-140$ |  |  |  |  | $\begin{array}{rr} \hline 12 / 4 / 15 & 23: 38 \\ 12 / 3 / 15 & 5: 46 \end{array}$ |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

| Project Location: Hylan Blvd/Mallory Ave. Staten Is | Sample Description: |
| :--- | :--- |
| Date Received: $11 / 25 / 2015$ |  |
| Field Sample \#: SB-07-comp | Sampled: $11 / 23 / 201523: 00$. |

Sample ID: 15K1266-02
Sample Matrix: Soil
Sampled: 11/23/2015 23:00

> Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 12/1/15 | 12/1/15 9:45 | LL |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/30/15 | 11/30/15 14:45 | AG |
| pH @ $25.5^{\circ} \mathrm{C}$ | 9.0 |  | pH Units | 1 | H-03 | SW-846 9045C | 12/2/15 | 12/2/15 20:00 | AMM |
| Reactive Cyanide | ND | 3.9 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9014 | 12/1/15 | 12/1/15 17:35 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 12/1/15 | 12/1/15 17:20 | AG |
| \% Solids | 86.7 |  | \% Wt | 1 |  | SM 2540G | 11/25/15 | 11/28/15 9:58 | MJR |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description:
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-07-comp
Sampled: 11/23/2015 23:00
Sample ID: 15K1266-02
Sample Matrix: Soil
TCLP - Metals Analyses

|  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Analyte |  | Results | RL |  |  |  | Date <br> Prepared | Date/Time <br> Analyzed |
| Mercury Analyst |  |  |  |  |  |  |  |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15K1266
Date Received: 11/25/2015
Field Sample \#: SB-07-comp Sampled: 11/23/2015. 23:00
Sample ID: 15K1266-02
Sample Matrix: Soil
TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium | 0.3 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium | $<0.050$ | 0.05 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hylan Blvd/Mallory Ave. Staten Is
Sample Description:
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-08-5.5-6
Sampled: 11/23/2015 23:50
Sample ID: 15K1266-03
Sample Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | 0.12 | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | Z-01 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Acrylonitrile | ND | 0.0070 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Benzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Bromobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Bromochloromethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Bromodichloromethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Bromoform | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Bromomethane | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 2-Butanone (MEK) | ND | 0.046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| n -Butylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| sec-Butylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| tert-Butylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Carbon Disulfide | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Carbon Tetrachloride | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Chlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Chlorodibromomethane | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Chloroethane | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Chioroform | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Chloromethane | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 2-Chlorotoluene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 4-Chlorotoluene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Dibromomethane | ND | 0.0023 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1-Dichloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2-Dichloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1-Dichloroethylene | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2-Dichloropropane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,3-Dichloropropane | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 2,2-Dichloropropane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1-Dichloropropene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| trans-1,3-Dichloropropene | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Diethyl Ether | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
|  |  |  |  |  |  |  |  | Page 18 | of 57 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is
Date Received: 11/25/2015
Field Sample \#: SB-08-5.5-6 Sampled: 11/23/2015 23:50
Sample ID: 15K1266-03
Sample Matrix: Soil
Sample Flags: PR-03, PR-15 Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,4-Dioxane | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Ethylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Hexachlorobutadiene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 2-Hexanone (MBK) | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12///15 12:07 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | I |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| p-Isopropyltoluene ( p -Cymene) | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Methylene Chloride | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Naphthalene | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| n-Propylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Styrene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1,1,2-Tetrachloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1,2,2-Tetrachloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Tetrachloroethylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Tetrahydrofuran | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Toluene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2,3-Trichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2,4-Trichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,3,5-Trichlorobenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1,1-Trichloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1,2-Trichloroethane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Trichloroethylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Trichlorofluoromethane (Freon 11) | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| 1,3,5-Trimethylbenzene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Vinyl Chloride | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| $\mathrm{m}^{+}+\mathrm{p}$ Xylene | ND | 0.0046 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| o-Xylene | ND | 0.0023 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:07 | MFF |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 99.4 | 70-130 |  |  |  |  | 12/1/15 12:07 |  |
| Toluene-d8 |  | 102 | 70-130 |  |  |  |  | 12/1/15 12:07 |  |
| 4-Bromofluorobenzene |  | 97.5 | 70-130 |  |  |  |  | 12/1/15 12:07 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-08-5.5-6 Sampled: 11/23/2015 23:50
Sample ID: 15K1266-03
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description:
Work Order: 15K1266
Date Received: 11/25/2015
Field Sample \#: SB-08-comp
Sampled: 11/23/2015 23:50
Sample ID: 15K1266-04
Samole Matrix: Soil
Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Acenaphthylene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Benzo(a)anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Benzo(a)pyrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Benzo(b)fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Benzo(g,h,i)perylene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Benzo(k)fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Chrysene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Dibenz ( $\mathrm{a}, \mathrm{h}$ )anthracene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Fluoranthene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Fluorene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Indeno( $1,2,3$-cd)pyrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| 2-Methylnaphthalene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Naphthalene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Phenanthrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Pyrene | ND | 0.20 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:16 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 87.8 | 30-130 |  |  |  |  | 12/2/15 18:16 |  |
| 2-Fluorobiphenyl |  | 102 | 30-130 |  |  |  |  | 12/2/15 18:16 |  |
| p-Terphenyl-d14 |  | 110 | 30-130 |  |  |  |  | 12/2/15 18:16 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description: Work Order: 15K1266
Date Received: 11/25/2015
Field Sample \#: SB-08-comp
Sampled: 11/23/2015 23:50
Sample ID: 15K1266-04
Sample Matrix: Soil
Polychlorinated Biphenyls By GC/ECD

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1221 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1232 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1242 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1248 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1254 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1260 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1262 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Aroclor-1268 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 2:58 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 109 | 30-150 |  |  |  |  | 12/3/15 2:58 |  |
| Decachlorobiphenyl [2] |  | 99.0 | 30-150 |  |  |  |  | 12/3/15 $2: 58$ |  |
| Tetrachloro-m-xylene [1] |  | 82.6 | 30-150 |  |  |  |  | 12/3/15 2:58 |  |
| Tetrachloro-m-xylene [2] |  | 95.5 | 30-150 |  |  |  |  | 12/3/15 $2: 58$ |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: *Hylan Blvd/Mallory Ave. Staten Is Sample Description: Work Order: 15 K 1266
Date Received: $11 / 25 / 2015$
Field Sample \#: SB-08-comp
Sampled: 11/23/2015 23:50
Sample ID: 15K1266-04
Samole Matrix: Soil
Sample Flags: PR-03
Petroleum Hydrocarbons Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 1.4 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 12/4/15 | 12/5/15 0:14 | EEH |
| Diesel Range Organics | 17 | 9.9 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/28/15 | 12/3/15 4:54 | SCS |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1-Chloro-3-fluorobenzene |  | 110 | 70-130 |  |  |  |  | 12/5/15 0:14 |  |
| o-Terphenyl |  | 81.4 | 40-140 |  |  |  |  | 12/3/15 4:54 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description: Work Order: 15 K 1266

Date Received: 11/25/2015
Field Sample \#: SB-08-comp Sampled: 11/23/2015 23:50
Sample ID: 15K1266-04
Samole Matrix: Soil
Conventional Chemistry Parameters hy EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B | 12/1/15 | 12/1/15 9:45 | LL |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 1030 | 11/30/15 | 11/30/15 14:45 | AG |
| pH@24.2 ${ }^{\circ} \mathrm{C}$ | 8.0 |  | pH Units | 1 | H-03 | SW-846 9045C | 12/2/15 | 12/2/15 20:00 | AMM |
| Reactive Cyanide | ND | 4.0 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-8469014 | 12/1/15 | 12/1/15 17:35 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 12/1/15 | 12/1/15 17:20 | AG |
| \% Solids | 84.1 |  | \% Wt | 1 |  | SM 2540G | 11/25/15 | 11/28/15 9:58 | M.IR |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15K1266
Date Received: 11/25/2015
Field Sample \#: SB-08-comp Sampled: 11/23/2015 23:50
Sample ID: 15K1266-04
Sample Matrix: Soil
TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury | ND | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 7470A | 11/30/15 | 12/1/15 12:13 | SCB |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten I
Sample Description:
Work Order: 15K 1266
Date Received: 11/25/2015
Field Sample \#: SB-08-comp
Sampled: 11/23/2015 23:50
Sample ID: 15K1266-04
Sample Matrix: Soil
TCLP - Metals Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arsenic | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Barium | 1.41 | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Cadmium | $<0.050$ | 0.05 | mg/L | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Chromium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Lead | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Selenium | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |
| Silver | $<0.10$ | 0.1 | $\mathrm{mg} / \mathrm{L}$ | 1 |  | SW-846 6010C | 12/6/15 | 12/7/15 0:00 | PEL |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description: Work Order: 15K 1266

Date Received: 11/25/2015
Field Sample \#: SB-09-5.5-6 Sampled: 11/24/2015 00:30

Sample ID: 15K1266-05
Sample Matrix: Soil
Sample Flags: PR-03, PR-15
Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | ND | 0.12 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Acrylonitrile | ND | 0.0072 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| tert-Amyl Methyl Ether (TAME) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Benzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Bromobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Bromochloromethane | ND | 00024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Bromodichloromethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Bromoform | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Bromomethane | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 2-Butanone (MEK) | ND | 0.048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| tert-Butyl Alcohol (TBA) | ND | 0.048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| n-Butylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| sec-Butylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| tert-Butylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| tert-Butyl Ethyl Ether (TBEE) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Carbon Disulfide | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Carbon Tetrachloride | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Chlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Chlorodibromomethane | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Chloroethane | ND | 0.024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Chloroform | ND | 0.0048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Chloromethane | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | L-04 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 2-Chlorotoluene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 4-Chlorotoluene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2-Dibromoethane (EDB) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Dibromomethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2-Dichlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,3-Dichlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,4-Dichlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| trans-1,4-Dichloro-2-butene | ND | 0.0048 | $\mathrm{mg} / \mathrm{Kg} \mathrm{dry}$ | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Dichlorodifluoromethane (Freon 12) | ND | 0.024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1-Dichloroethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2-Dichloroethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1-Dichloroethylene | ND | 0.0048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| cis-1,2-Dichloroethylene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| trans-1,2-Dichloroethylene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2-Dichloropropane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,3-Dichloropropane | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 2,2-Dichloropropane | ND | 0.0024 | mg/Kg dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1-Dichloropropene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| cis-1,3-Dichloropropene | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| trans-1,3-Dichloropropene | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Diethyl Ether | ND | 0.024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
|  |  |  |  |  |  |  |  | Page 27 of 57 |  |

HAZ-245

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL, 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description
Work Order: 15K 1266
Date Received: 11/25/2015
Field Sample \#: SB-09-5.5-6 Sampled: 11/24/2015 00:30
Sample ID: 15K1266-05

## Sample Matrix: Soil

Sample Flags: PR-03, PR-15 Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diisopropyl Ether (DIPE) | ND | 0.0012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,4-Dioxane | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Ethylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Hexachlorobutadiene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 2-Hexanone (MBK) | ND | 0.024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Isopropylbenzene (Cumene) | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| p -Isopropyltoluene ( p -Cymene) | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.0048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Methylene Chloride | ND | 0.024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Naphthalene | ND | 0.0048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| n-Propylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Styrene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1,1,2-Tetrachloroethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1,2,2-Tetrachloroethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 | V-05 | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Tetrachloroethylene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Tetrahydrofuran | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Toluene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2,3-Trichlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2,4-Trichlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,3,5-Trichlorobenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1,1-Trichloroethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1,2-Trichloroethane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Trichloroethylene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Trichlorofluoromethane (Freon 11) | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2,3-Trichloropropane | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,2,4-Trimethylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| 1,3,5-Trimethylbenzene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Vinyl Chloride | ND | 0.012 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| $\mathrm{m}+\mathrm{p}$ Xylene | ND | 0.0048 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| o-Xylene | ND | 0.0024 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8260C | 12/1/15 | 12/1/15 12:36 | MFF |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1,2-Dichloroethane-d4 |  | 99.2 | 70-130 |  |  |  |  | 12/1/15 12:36 |  |
| Toluene-d8 |  | 101 | 70-130 |  |  |  |  | 12/1/15 12:36 |  |
| 4-Bromofluorobenzene |  | 96.7 | 70-130 |  |  |  |  | 12/1/15 12:36 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is
Sample Description:
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-09-5.5-6
Sampled: 11/24/2015 00:30
Sample ID: 15K1266-05
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

|  | Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% Solids |  | 82.8 |  | \% Wt | 1 |  | SM 2540 G | 11/25/15 | 11/28/15 9.58 | MJR |

Field Sample \#: SB-09-comp . Sampled: 11/24/2015 00:30

Samole ID: 15K1266-06
Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | 0.25 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Acenaphthylene | ND | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Anthracene | 1.0 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Benzo(a)anthracene | 1.6 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Benzo(a)pyrene | 1.2 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Benzo(b)fluoranthene | 1.6 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Benzo(g,h,i)perylene | 0.61 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Benzo(k)fluoranthene | 0.70 | 0.21 | mg/Kg dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Chrysene | 1.5 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Dibenz(a,h)anthracene | 0.23 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Fluoranthene | 3.7 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Fluorene | 0.86 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Indeno(1,2,3-cd)pyrene | 0.69 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| 2-Methylnaphthalene | ND | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Naphthalene | ND | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Phenanthrene | 3.8 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Pyrene | 3.0 | 0.21 | $\mathrm{mg} / \mathrm{Kg}$ dy | 1 |  | SW-846 8270D | 11/28/15 | 12/2/15 18:40 | CMR |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Nitrobenzene-d5 |  | 85.4 | 30-130 |  |  |  |  | 12/2/15 18:40 |  |
| 2-Fluorobiphenyl |  | 98.6 | 30-130 |  |  |  |  | 12/2/15 18:40 |  |
| p-Terphenyl-d14 |  | 105 | 30-130 |  |  |  |  | 12/2/15 18:40 |  |

# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 

Project Location: Hylan Blvd/Mallory Ave. Staten Is
Date Received: $11 / 25 / 2015$
Field Sample \#: SB-09-comp
Sampled: 11/24/2015 00:30
Sample ID: 15K1266-06
Sample Matrix: Soil

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1221 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1232 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1242 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1248 [1] | ND | 0.12 | mg/Kg dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1254 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1260 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1262 [1] | ND | 0.12 | mg/Kg dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Aroclor-1268 [1] | ND | 0.12 | $\mathrm{mg} / \mathrm{Kg}$ dry | 5 |  | SW-846 8082A | 11/28/15 | 12/3/15 3:11 | KAL |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| Decachlorobiphenyl [1] |  | 102 | 30-150 |  |  |  |  | 12/3/15 3:11 |  |
| Decachlorobiphenyl [2] |  | 92.9 | 30-150 |  |  |  |  | 12/3/15 3:11 |  |
| Tetrachloro-m-xylene [1] |  | 94.0 | 30-150 |  |  |  |  | 12/3/15 3:11 |  |
| Tetrachloro-m-xylene [2] |  | 92.4 | 30-150 |  |  |  |  | 12/3/15 3:11 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave Staten Is
Sample Description:
Work Order: 15 K 1266
Date Received: 11/25/2015
Field Sample \#: SB-09-comp
Sampled: 11/24/2015 00:30
Sample ID: 15K1266-06
Sample Matrix: Soil
Sample Flags: PR-03 Petroleum Hydrocarbons Analyses

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date <br> Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND | 1.4 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 12/4/15 | 12/5/15 0:50 | EEH |
| Diesel Range Organics | 33 | 10 | $\mathrm{mg} / \mathrm{Kg}$ dry | 1 |  | SW-846 8015C | 11/28/15 | 12/3/15 5:12 | SCS |
| Surrogates |  | \% Recovery | Recovery Limits |  | Flag/Qual |  |  |  |  |
| 1-Chloro-3-fluorobenzene |  | 109 | 70-130 |  |  |  |  | 12/5/15 0:50 |  |
| o-Terphenyl |  | 80.3 | 40-140 |  |  |  |  | 12/3/15 5:12 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description:
Work Order: 15K1266
Date Received: 11/25/2015
Field Sample \#: SB-09-comp Sampled: 11/24/2015 00:30
Sample ID: 15K1266-06
Sample Matrix: Soil
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time <br> Analyzed | Analyst |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Liquid | Absent |  | present/absent | 1 |  | SW-846 9095B |  |  | Analyst |
| Ignitability | Absent |  | present/absent | 1 |  | SW-846 9095B SW-846 1030 | 2/1/15 | 12/1/15 9:45 | LL |
| pH @ $24.4{ }^{\circ} \mathrm{C}$ | 8.8 |  | pH Units | 1 | H-03 | W-846 1030 | 11/30/15 | 11/30/15 14:45 | AG |
| Reactive Cyanide | ND | 39 |  |  | H-03 | SW-846 9045C | 12/2/15 | 12/2/15 20:00 | AMM |
|  | ND | 3.9 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9014 | 12/1/15 | 12/1/15 17:35 | AG |
| Reactive Sulfide | ND | 20 | $\mathrm{mg} / \mathrm{Kg}$ | 1 |  | SW-846 9030A | 12/1/15 | 12/1/15 17:20 |  |
| \% Solids | 82.4 |  | \% Wt | 1 |  | SM 2540G | 11/25/15 | 11/28/15 9.58 | MJR |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten Is Sample Description:
Date Received: 11/25/2015
Field Sample \#: SB-09-comp Sampled: 11/24/2015 00:30
Sample ID: 15K1266-06
Sample Matrix: Soil
TCLP - Metals Analyses


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Project Location: Hylan Blvd/Mallory Ave. Staten I
Sample Description
Work Order: 15K 1266
Date Received: 11/25/2015
Field Sample \#: SB-09-comp
Sampled: 11/24/2015 00:30
Sample ID: 15K1266-06
Sample Matrix: Soil
TCLP - Metals Analyses


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
Sample Extraction Data

Prep Method: \% Solids-SM 2540G

|  | Batch | Date |
| :--- | :--- | :--- |
| Lab Number [Field ID] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1266-01$ [SB-07-5.5-6] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1266-02[$ SB-07-comp] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1266-03[$ SB-08-5.5-6] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1266-04[$ SB-08-comp] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1266-05[$ SB-09-5.5-6] | B136359 | $11 / 25 / 15$ |
| $15 \mathrm{~K} 1266-06[$ SB-09-comp] |  | $\cdots$ |

SW-846 1030

| Lab Number [Field ID] | Batch | lnitial [g] | Date |
| :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-02$ [SB-07-comp] | B136456 | 50.0 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1266-04$ [SB-08-comp] | B136456 | 50.0 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1266-06$ [SB-09-comp] | B136456 | 50.0 | $11 / 30 / 15$ |

Prep Method: SW-846 7470A Prep-SW-846 7470A

| Lab Number [Field ID] | Batch | Initial [mL] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-02[S B-07-c o m p]$ | B136443 | 6.00 | 6.00 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1266-04$ [SB-08-comp] | B136443 | 6.00 | 6.00 | $11 / 30 / 15$ |
| $15 \mathrm{~K} 1266-06[$ SB-09-comp] | B136443 | 6.00 | 6.00 | $11 / 30 / 15$ |

Prep Method: SW-846 3546-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-02[$ SB-07-comp] | B136376 | 30.2 | 1.00 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1266-04[$ SB-08-comp] | B136376 | 30.1 | $11 / 28 / 15$ |  |
| $15 \mathrm{~K} 1266-06[$ SB-09-comp] | B136376 | 30.3 | 1.00 | $11 / 28 / 15$ |

Prep Method: SW-846 5035/5030B-SW-846 8015C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-02[S B-07-\mathrm{comp}]$ | B136887 | 15.1 | 17.0 | $12 / 04 / 15$ |
| $15 \mathrm{~K} 1266-04[\mathrm{SB}-08$-comp] | B 136887 | 15.0 | 17.4 | $12 / 04 / 15$ |
| $15 \mathrm{~K} 1266-06[$ SB-09-comp] | B136887 | 15.1 | 17.7 | $12 / 04 / 15$ |

Prep Method: SW-846 3546-SW-846 8082A

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-02[\mathrm{SB}-07$-comp] | B136379 | 10.1 | 10.0 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1266-04[$ SB-08-comp] | B136379 | 10.0 | 10.0 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1266-06[$ SB-09-comp] | B136379 | 10.3 | 10.0 | $11 / 28 / 15$ |

Prep Method: SW-846 5035-SW-846 8260C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B136588 | 5.00 | 10.0 | 12/01/15 |  |
| 15K1266-01 [SB-07-5.5-6] |  |  | 10.0 | 12/01/15 |  |
| 15K1266-03 [SB-08-5.5-6] | B136588 |  |  |  |  |
|  |  |  |  |  | Page 36 of 57 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## Sample Extraction Data

Prep Method: SW-846 5035-SW-846 8260C

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-05[$ SB-09-5.5-6] | B136588 | 5.00 | 10.0 | 12/01/15 |

Prep Method: SW-846 3546-SW-846 8270D

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1266-02 [SB-07-comp] | B136380 | 30.0 | 1.00 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1266-04$ [SB-08-comp] | B 136380 | 30.2 | 1.00 | $11 / 28 / 15$ |
| $15 \mathrm{~K} 1266-06$ [SB-09-comp] | B 136380 | 30.1 | 1.00 | $11 / 28 / 15$ |

SW-846 9014

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1266-02 [SB-07-comp] | B136582 | 25.5 | 250 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1266-04$ [SB-08-comp] | B136582 | 25.2 | 250 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1266-06$ [SB-09-comp] | B136582 | 25.4 | 250 | $12 / 01 / 15$. |

SW-846 9030A

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1266-02 [SB-07-comp] | B136616 | 25.5 | 250 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1266-04$ [SB-08-comp] | B136616 | 25.2 | 250 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1266-06$ [SB-09-comp] | B136616 | 25.4 | 250 | $12 / 01 / 15$ |

SW-846 9045C

| Lab Number [Field ID] | Batch | Initial [g] | Date |
| :--- | :--- | :--- | :--- |
| $15 \mathrm{~K} 1266-02$ [SB-07-comp] | B136681 | 20.0 | $12 / 02 / 15$ |
| $15 \mathrm{~K} 1266-04$ [SB-08-comp] | B136681 | 20.0 | $12 / 02 / 15$ |
| $15 \mathrm{~K} 1266-06$ [SB-09-comp] | B136681 | 20.0 | $12 / 02 / 15$ |

## SW-846 9095B

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
| :--- | :--- | :--- | :--- | :--- |
| 15K1266-02 [SB-07-comp] | B136547 | 100 | 100 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1266-04[$ SB-08-comp] | B136547 | 100 | 100 | $12 / 01 / 15$ |
| $15 \mathrm{~K} 1266-06[$ SB-09-comp] | B136547 | 100 | 100 | $12 / 01 / 15$ |

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 <br> QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

|  | Result | Reporting <br> Limit | Units | Spike <br> Level | Source Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result |  | Units |  |  | \%REC |  |  |  |  |

Batch B136588 - SW-846 5035


39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TE.L. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136588-SW-846 5035

| Blank (B136588-BLK1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 4-Methyl-2-pentanone (MIBK) | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet , |  |  |  |  |  |
| Naphthalene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| n-Propylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Styrene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,1,1,2-Tetrachloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,1,2,2-Tetrachloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  | V-05 |
| Tetrachloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Tetrahydrofuran | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Toluene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,2,3-Trichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,2,4-Trichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,3,5-Trichlorobenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,1,1-Trichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,1,2-Trichloroethane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Trichloroethylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Trichlorofluoromethane (Freon 11) | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,2,3-Trichloropropane | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,2,4-Trimethylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| 1,3,5-Trimethylbenzene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Vinyl Chloride | ND | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| m+p Xylene | ND | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| o-Xylene | ND | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0478 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 95.7 |  | 70-130 |  |
| Surrogate: Toluene-d8 | 0.0509 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 102 |  | 70-130 |  |
| Surrogate: 4-Bromofluorobenzene | 0.0486 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 97.2 |  | 70-130 |  |
| LCS (B136588-BS1) |  |  |  | epared |  |  |  |  |
| Acetone | 0.149 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 74.6 |  | 70-160 |  |
| Acrylonitrile | 0.0172 | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 85.8 |  | 70-130 |  |
| tert-Amyl Methyl Ether (TAME) | 0.0183 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.7 |  | 70-130 |  |
| Benzene | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 |  | 70-130 |  |
| Bromobenzene | 0.0188 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.9 |  | 70-130 |  |
| Bromochloromethane | 0.0192 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.8 |  | 70-130 |  |
| Bromodichloromethane | 0.0172 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 85.9 |  | 70-130 |  |
| Bromoform | 0.0205 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 |  | 70-130 |  |
| Bromomethane | 0.00706 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 35.3 | * | 40-130 | L-04 |
| 2-Butanone (MEK) | 0.163 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 81.7 |  | 70-160 |  |
| tert-Butyl Alcohol (TBA) | 0.196 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 98.0 |  | 40-130 |  |
| n-Butylbenzene | 0.0202 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 |  | 70-130 |  |
| sec-Butylbenzene | 0.0207 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 103 |  | 70-130 |  |
| tert-Butylbenzene | 0.0198 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 98.8 |  | 70-160 |  |
| tert-Butyl Ethyl Ether (TBEE) | 0.0193 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.5 |  | 70-130 |  |
| Carbon Disulfide | 0.0123 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 61.5 | * | 70-130 | L-04 |
| Carbon Tetrachloride | 0.0166 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.1 |  | 70-130 |  |
| Chlorobenzene | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.9 |  | 70-130 |  |
| Chlorodibromomethane | 0.0173 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.4 |  | 70-130 |  |
| Chloroethane | 0.0191 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.5 |  | 70-130 |  |
| Chloroform | 0.0195 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.3 |  | 70-130 |  |
| Chloromethane | 0.0123 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 61.4 | * | 70-130 | L-04 |
| 2-Chlorotoluene | 0.0196 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.8 |  | 70-130 |  |

Page 39 of 57

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136588-SW-846 5035

| LCS (B136588-BS1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-Chlorotoluene | 0.0191 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.7 | 70-130 |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0163 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 81.4 | 70-130 | V-05 |  |
| 1,2-Dibromoethane (EDB) | 0.0185 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.6 | 70-130 |  |  |
| Dibromomethane | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.8 | 70-130 |  |  |
| 1,2-Dichlorobenzene | 0.0175 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 87.6 | 70-130 |  |  |
| 1,3-Dichlorobenzene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.2 | 70-130 |  |  |
| 1,4-Dichlorobenzene | 0.0178 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.9 | 70-130 |  |  |
| trans-1,4-Dichloro-2-butene | 0.0157 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 78.7 | 70-130 | V-05 |  |
| Dichlorodifluoromethane (Freon 12) | 0.00970 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 48.5 | 40-160 | V-05 | $\dagger$ |
| 1,1-Dichloroethane | 0.0202 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-130 |  |  |
| 1,2-Dichloroethane | 0.0187 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.4 | 70-130 |  |  |
| 1,1-Dichloroethylene | 0.0181 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.5 | 70-130 |  |  |
| cis-1,2-Dichloroethylene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 |  |  |
| trans-1,2-Dichloroethylene | 0.0185 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.5 | 70-130 |  |  |
| 1,2-Dichloropropane | 0.0188 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.9 | 70-130 |  |  |
| 1,3-Dichloropropane | 0.0169 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 84.7 | 70-130 |  |  |
| 2,2-Dichloropropane | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.1 | 70-130 |  |  |
| 1,1-Dichloropropene | 0.0195 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.5 | 70-130 |  |  |
| cis-1,3-Dichloropropene | 0.0162 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 80.9 | 70-130 |  |  |
| trans-1,3-Dichloropropene | 0.0177 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.5 | 70-130 |  |  |
| Diethyl Ether | 0.0184 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.9 | 70-130 |  |  |
| Diisopropyl Ether (DIPE) | 0.0187 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.6 | 70-130 |  |  |
| 1,4-Dioxane | 0.160 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 80.0 | 40-160 |  | $\dagger$ |
| Ethylbenzene | 0.0195 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.6 | $70-130$ |  |  |
| Hexachlorobutadiene | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-160 |  |  |
| 2-Hexanone (MBK) | 0.160 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 80.2 | 70-160 |  | $\dagger$ |
| Isopropylbenzene (Cumene) | 0.0199 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 99.7 | 70-130 |  |  |
| p-Isopropyltoluene (p-Cymene) | 0.0203 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 102 | 70-130 |  |  |
| Methyl tert-Butyl Ether (MTBE) | 0.0183 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.7 | 70-130 |  |  |
| Methylene Chloride | 0.0150 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 75.2 | 40-160 |  | $\dagger$ |
| 4-Methyl-2-pentanone (MIBK) | 0.171 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 85.3 | 70-160 |  | $\dagger$ |
| Naphthalene | 0.0181 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.4 | 40-130 |  | $\dagger$ |
| n-Propylbenzene | 0.0200 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 100 | 70-130 |  |  |
| Styrene | 0.0201 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 101 | 70-130 |  |  |
| 1,1,1,2-Tetrachloroethane | 0.0151 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 75.4 | 70-130 |  |  |
| 1,1,2,2-Tetrachloroethane | 0.0150 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 74.8 | 70-130 | V-05 |  |
| Tetrachloroethylene | 0.0167 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.7 | 70-130 |  |  |
| Tetrahydrofuran | 0.0180 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.0 | 70-130 |  |  |
| Toluene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 |  |  |
| 1,2,3-Trichlorobenzene | 0.0187 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.5 | 70-130 |  |  |
| 1,2,4-Trichlorobenzene | 0.0189 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 94.6 | 70-130 |  |  |
| 1,3,5-Trichlorobenzene | 0.0184 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 | 70-130 |  |  |
| 1,1,1-Trichloroethane | 0.0155 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 77.6 | 70-130 |  |  |
| 1,1,2-Trichloroethane | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.3 | 70-130 |  |  |
| Trichloroethylene | 0.0192 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.1 | 70-130 |  |  |
| Trichlorofluoromethane (Freon 11) | 0.0182 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.8 | 70-130 |  |  |
| 1,2,3-Trichloropropane | 0.0161 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 80.5 | 70-130 |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 0.0195 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.5 | 70-130 |  |  |
| 1,2,4-Trimethylbenzene | 0.0194 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.9 | 70-130 |  |  |
| 1,3,5-Trimethylbenzene | 0.0208 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 104 | 70-130 |  |  |
| Vinyl Chloride | 0.0149 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 74.4 | 40-130 |  | $\dagger$ |

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

|  | Reporting |  |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136588 - SW-846 5035

| LCS (B136588-BS1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| m+p Xylene | 0.0387 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0400 | 96.9 | $70-130$ |
| o-Xylene | 0.0189 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 94.7 | $70-130$ |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0491 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 98.2 | $70-130$ |
| Surrogate: Toluene-d8 | 0.0507 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 101 | $70-130$ |  |
| Surrogate: 4-Bromofluorobenzene | 0.0492 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0500 | 98.5 | $70-130$ |  |


| LCS Dup (B136588-BSD1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetone | 0.136 | 0.10 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 67.8 | * | 70-160 | 9.56 | 25 | L-07 | $\dagger$ |
| Acrylonitrile | 0.0168 | 0.0060 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.9 |  | 70-130 | 2.24 | 25 |  |  |
| tert-Amyl Methyl Ether (TAME) | 0.0178 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.8 |  | 70-130 | 3.21 | 25 |  |  |
| Benzene | 0.0191 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 95.7 |  | 70-130 | 5.88 | 25 |  |  |
| Bromobenzene | 0.0181 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.3 |  | 70-130 | 3.91 | 25 |  |  |
| Bromochloromethane | 0.0180 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.2 |  | 70-130 | 6.02 | 25 |  |  |
| Bromodichloromethane | 0.0163 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 81.4 |  | 70-130 | 5.38 | 25 |  |  |
| Bromoform | 0.0200 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 100 |  | 70-130 | 2.37 | 25 |  |  |
| Bromomethane | 0.00674 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 33.7 | * | 40-130 | 4.64 | 25 | L-04 | $\dagger$ |
| 2-Butanone (MEK) | 0.155 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 77.5 |  | 70-160 | 5.30 | 25 |  | $\dagger$ |
| tert-Butyl Alcohol (TBA) | 0.191 | 0.040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 95.4 |  | 40-130 | 2.74 | 25 |  | $\dagger$ |
| n-Butylbenzene | 0.0195 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 97.5 |  | 70-130 | 3.63 | 25 |  |  |
| sec-Butylbenzene | 0.0197 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 98.7 |  | 70-130 | 4.55 | 25 |  |  |
| tert-Butylbenzene | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.1 |  | 70-160 | 5.94 | 25 |  | $\dagger$ |
| tert-Butyl Ethyl Ether (TBEE) | 0.0183 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.6 |  | 70-130 | 5.21 | 25 |  |  |
| Carbon Disulfide | 0.0112 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 55.9 | * | 70-130 | 9.54 | 25 | L-04 |  |
| Carbon Tetrachloride | 0.0157 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 78.4 |  | 70-130 | 5.82 | 25 |  |  |
| Chlorobenzene | 0.0176 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 88.2 |  | 70-130 | 5.19 | 25 |  |  |
| Chlorodibromomethane | 0.0168 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 83.8 |  | 70-130 | 3.06 | 25 |  |  |
| Chloroethane | 0.0175 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 87.5 |  | 70-130 | 8.74 | 25 |  |  |
| Chloroform | 0.0184 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.0 |  | 70-130 | 5.60 | 25 |  |  |
| Chloromethane | 0.0111 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 55.7 | * | 70-130 | 9.74 | 25 | L-04 |  |
| 2-Chlorotoluene | 0.0186 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 93.2 |  | 70-130 | 4.82 | 25 |  |  |
| 4-Chlorotoluene | 0.0183 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 91.7 |  | 70-130 | 4.27 | 25 |  |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.0154 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 77.1 |  | 70-130 | 5.43 | 25 | V-05 |  |
| 1,2-Dibromoethane (EDB) | 0.0182 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.8 |  | 70-130 | 1.96 | 25 |  |  |
| Dibromomethane | 0.0178 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.0 |  | 70-130 | 4.18 | 25 |  |  |
| 1,2-Dichlorobenzene | 0.0172 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.0 |  | 70-130 | 1.84 | 25 |  |  |
| 1,3-Dichlorobenzene | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.5 |  | 70-130 | 2.97 | 25 |  |  |
| 1,4-Dichlorobenzene | 0.0174 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 87.2 |  | 70-130 | 1.93 | 25 |  |  |
| trans-1,4-Dichloro-2-butene | 0.0141 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 70.3 |  | 70-130 | 11.3 | 25 | V-05 |  |
| Dichlorodifluoromethane (Freon 12) | 0.00916 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 45.8 |  | 40-160 | 5.73 | 25 | V-05 | $\dagger$ |
| 1,1-Dichloroethane | 0.0193 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 96.5 |  | 70-130 | 4.46 | 25 |  |  |
| 1,2-Dichloroethane | 0.0181 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.5 |  | 70-130 | 3.15 | 25 |  |  |
| 1,1-Dichloroethylene | 0.0169 | 0.0040 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 84.5 |  | 70-130 | 6.86 | 25 |  |  |
| cis-1,2-Dichloroethylene | 0.0174 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.9 |  | 70-130 | 5.70 | 25 |  |  |
| trans-1,2-Dichloroethylene | 0.0179 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.5 |  | 70-130 | 3.30 | 25 |  |  |
| 1,2-Dichloropropane | 0.0178 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 89.1 |  | 70-130 | 5.25 | 25 |  |  |
| 1,3-Dichloropropane | 0.0165 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 82.3 |  | 70-130 | 2.87 | 25 |  |  |
| 2,2-Dichloropropane | 0.0173 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.5 |  | 70-130 | 6.27 | 25 |  |  |
| 1,1-Dichloropropene | 0.0185 | 0.0020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 92.3 |  | 70-130 | 5.48 | 25 |  |  |
| cis-1,3-Dichloropropene | 0.0154 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 77.1 |  | 70-130 | 4.81 | 25 |  |  |
| trans-1,3-Dichloropropene | 0.0171 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 85.6 |  | 70-130 | 3.33 | 25 |  |  |
| Diethyl Ether | 0.0172 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 86.1 |  | 70-130 | 6.52 | 25 |  |  |
| Diisopropyl Ether (DIPE) | 0.0181 | 0.0010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0200 | 90.6 |  | 70-130 | 3.26 | 25 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Batch B136588-SW-846 5035


## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control



Batch B136380 - SW-846 3546


| LCS (B136380-BS1) | Prepared: 11/28/15 Analyzed: 12/01/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | 1.48 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 88.7 | 40-140 |
| Acenaphthylene | 1.50 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 89.8 | 40-140 |
| Anthracene | 1.65 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 99.2 | 40-140 |
| Benzo(a)anthracene | 1.68 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 101 | 40-140 |
| Benzo(a)pyrene | 1.62 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 97.3 | 40-140 |
| Benzo(b)fluoranthene | 1.57 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.4 | 40-140 |
| Benzo(g,h,i)perylene | 1.64 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 98.3 | 40-140 |
| Benzo(k)fluoranthene | 1.58 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.9 | 40-140 |
| Chrysene | 1.66 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 99.3 | 40-140 |
| Dibenz(a,h)anthracene | 1.70 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 102 | 40-140 |
| Fluoranthene | 1.53 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 91.8 | 40-140 |
| Fluorene | 1.54 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 92.7 | 40-140 |
| Indeno( $1,2,3-\mathrm{cd}$ )pyrene | 1.61 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 96.6 | 40-140 |
| 2-Methylnaphthalene | 1.57 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 94.0 | 40-140 |
| Naphthalene | 1.51 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 90.7 | 40-140 |
| Phenantbrene | 1.65 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | . 1.67 | 99.3 | 40-140 |
| Pyrene | 1.93 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 116 | 40-140 |
| Surrogate: Nitrobenzene-d5 | 3.44 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 103 | 30-130 |
| Surrogate: 2-Fluorobiphenyl | 3.35 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 101 | 30-130 |
| Surrogate: p-Terphenyl-d14 | 4.06 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 122 | 30-130 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

|  | Result | Reporting Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result |  | Units |  |  |  |  |  |  |  |


| LCS Dup (B136380-BSD1) | Prepared: 11/28/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acenaphthene | 1.64 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 98.4 | 40-140 | 10.3 | 30 |  |
| Acenaphthylene | 1.62 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 97.5 | 40-140 | 8.18 | 30 |  |
| Anthracene | 1.81 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 108 | 40-140 | 8.96 | 30 |  |
| Benzo(a)anthracene | 1.82 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 109 | 40-140 | 8.21 | 30 |  |
| Benzo(a)pyrene | 1.76 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 106 | 40-140 | 8.22 | 30 |  |
| Benzo(b)fluoranthene | 1.65 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 99.2 | 40-140 | 4.98 | 30 |  |
| Benzo(g,h,i)perylene | 1.71 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 103 | 40-140 | 4.36 | 30 |  |
| Benzo(k)fluoranthene | 1.74 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 105 | 40-140 | 9.84 | 30 |  |
| Chrysene | $\cdot 1.77$ | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 106 | 40-140 | 6.92 | 30 |  |
| Dibenz(a,h)anthracene | 1.77 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 106 | 40-140 | 4.25 | 30 |  |
| Fluoranthene | 1.70 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 102 | 40-140 | 10.5 | 30 |  |
| Fluorene | 1.72 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 103 | 40-140 | 10.7 | 30 |  |
| Indeno(1,2,3-cd)pyrene | 1.74 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 104 | 40-140 | 7.90 | 30 |  |
| 2-Methylnaphthalene | 1.70 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 102 | 40-140 | 7.95 | 30 |  |
| Naphthalene | 1.56 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 93.7 | 40-140 | 3.34 | 30 |  |
| Phenanthrene | 1.82 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 109 | 40-140 | 9.76 | 30 |  |
| Pyrene | 2.08 | 0.17 | $\mathrm{mg} / \mathrm{Kg}$ wet | 1.67 | 125 | 40-140 | 7.65 | 30 |  |
| Surrogate: Nitrobenzene-d5 | 3.50 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 105 | 30-130 |  |  |  |
| Surrogate: 2-Fluorobiphenyl | 3.68 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 110 | 30-130 |  |  |  |
| Surrogate: p-Terphenyl-d14 | 4.51 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 135 | 30-130 |  |  | S-07 |

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

| Analyte | Result | Reporting <br> Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Batch B136379-SW-846 3546

| Blank (B136379-BLK1) | Prepared: 11/28/15 Analyzed: 12/02/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aroclor-1016 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1016 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1221 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1221[2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1232 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1232 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1242 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1242 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1248 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1248 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1254 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1254 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1260 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1260[2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1262 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1262 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1268 | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Aroclor-1268 [2C] | ND | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Surrogate: Decachlorobiphenyl | 0.241 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 121 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.237 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 118 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.199 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 99.6 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.216 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 108 | 30-150 |  |  |
| LCS (B136379-BS1) |  |  |  | epared: | d: 12 |  |  |  |
| Aroclor-1016 | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 102 | 40-140 |  |  |
| Aroclor-1016 [2C] | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 102 | 40-140 |  |  |
| Aroclor-1260 | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 99.8 | 40-140 |  |  |
| Aroclor-1260 [2C] | 0.21 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 103 | 40-140 |  |  |
| Surrogate: Decachlorobiphenyl | 0.226 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 113 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.221 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 110 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.186 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 93.2 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.201 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 100 | 30-150 |  |  |
| LCS Dup (B136379-BSD1) |  |  |  | pared: | d: 12 |  |  |  |
| Aroclor-1016 | 0.21 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 103 | 40-140 | 0.627 | 30 |
| Aroclor-1016 [2C] | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 102 | 40-140 | 0.0894 | 30 |
| Aroclor-1260 | 0.19 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 97.4 | 40-140 | 2.45 | 30 |
| Aroclor-1260 [2C] | 0.20 | 0.020 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 102 | 40-140 | 0.738 | 30 |
| Surrogate: Decachlorobiphenyl | 0.224 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 112 | 30-150 |  |  |
| Surrogate: Decachlorobiphenyl [2C] | 0.218 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 109 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene | 0.187 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 93.7 | 30-150 |  |  |
| Surrogate: Tetrachloro-m-xylene [2C] | 0.202 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.200 | 101 | 30-150 |  |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL
Petroleum Hydrocarbons Analyses - Quality Control


Batch B136376 - SW-846 3546

| Blank (B136376-BLK1) <br> Diesel Range Organics | Prepared: 11/28/15 Analyzed: 11/29/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ND |  | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |
| Surrogate: o-Terphenyl | 1.71 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 51.4 | 40-140 |
| LCS (B136376-BS1) |  |  |  | ared | : 11 |  |
| Diesel Range Organics | 23.2 | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet | 33.3 | 69.7 | 40-140 |
| Surrogate: o-Terphenyl | 2.29 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 68.8 | 40-140 |


| LCS Dup (B136376-BSD1) |  |  |  | pared: | d: 11/2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diesel Range Organics | 21.4 | 8.3 | $\mathrm{mg} / \mathrm{Kg}$ wet | 33.3 | 64.3 | 40-140 | 8.02 |
| Surrogate: o-Terphenyl | 2.15 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 3.33 | 64.5 | 40-140 |  |

## Batch B136887 - SW-846 5035/5030B

| Blank (B136887-BLK1) | Prepared \& Analyzed: 12/04/15 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gasoline Range Organics (GRO) | ND |  | $\mathrm{mg} / \mathrm{Kg}$ wet |  |  |  |  |  |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0157 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 105 | 70-130 |  |  |
| LCS (B136887-BS1) |  |  |  | pared \& | /15 |  |  |  |
| Gasoline Range Organics (GRO) | 0.238 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 95.1 | 80-120 |  |  |
| Surrogate: 1-Cbloro-3-fluorobenzene | 0.0156 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 104 | 70-130 |  |  |
| LCS Dup (B136887-BSD1) |  |  |  | pared 8 | 4/15 |  |  |  |
| Gasoline Range Organics (GRO) | 0.235 | 0.010 | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.250 | 94.1 | 80-120 | 1.10 | 30 |
| Surrogate: 1-Chloro-3-fluorobenzene | 0.0162 |  | $\mathrm{mg} / \mathrm{Kg}$ wet | 0.0150 | 108 | 70-130 |  |  |

## QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

|  |  | Reporting |  | Spike | Source |  | \%REC |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

Batch B136582 - SW-846 9014

| Blank (B136582-BLK1) |  |  |  | Prepared \& Analyzed: 12/01/15 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reactive Cyanide | ND | 0.40 | $\mathrm{mg} / \mathrm{Kg}$ |  |  |  |
| LCS (B136582-BS1) |  |  |  | Prepared \& Analyzed: 12/01/15 |  |  |
| Reactive Cyanide | 9.6 | 0.40 | $\mathrm{mg} / \mathrm{Kg}$ | 10.0 | 95.9 | $86.4-107$ |

Batch B136616-SW-846 9030A

| Blank (B136616-BLK1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reactive Sulfide | ND | 2.0 | $\mathrm{mg} / \mathrm{Kg}$ |  |  |  |
| LCS (B136616-BS1) | Prepared \& Analyzed: 12/01/15 |  |  |  |  |  |
| Reactive Sulfide | 12 | 2.0 | $\mathrm{mg} / \mathrm{Kg}$ | 14.8 | 83.8 | 42.9-132 |

Batch B136681 - SW-846 9045C

| LCS (B136681-BS1) | Prepared \& Analyzed: 12/02/15 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| pH | 6.02 | pH Units | 6.00 | 100 | 98.6-102 |
| LCS (B136681-BS2) | Prepared \& Analyzed: 12/02/15 |  |  |  |  |
| pH | 6.03 | pH Units | 6.00 | 100 | 98.6-102 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
QUALITY CONTROL

| TCLP - Metals Analyses - Quality Control |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | Reporting <br> Limit | Units | Spike <br> Level | Source <br> Result | \%REC | \%REC <br> Limits | RPD | RPD <br> Limit | Notes |
| Batch B136443 - SW-846 7470A Prep |  |  |  |  |  |  |  |  |  |  |
| Blank (B136443-BLK1) | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| Mercury | ND | 0.00010 | $\mathrm{mg} / \mathrm{L}$ |  |  |  |  |  |  |  |
| LCS (B136443-BS1) | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| Mercury | 0.00203 | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 0.00200 |  | 101 | 80-120 |  |  |  |
| LCS Dup (B136443-BSD1) | Prepared: 11/30/15 Analyzed: 12/01/15 |  |  |  |  |  |  |  |  |  |
| Mercury | 0.00198 | 0.00010 | $\mathrm{mg} / \mathrm{L}$ | 0.00200 |  | 99.2 | 80-120 | 2.23 | 20 |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES <br> SW-846 8082A

| Lab Sample ID: | B136379-BS1 |  | Date(s) Analyzed: | 12/02/2015 | 12/02/2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instrument ID (1): |  |  | Instrument ID (2): |  |  |  |
| GC Column (1): | ID: | (mm) | GC Column (2): |  | ID: | (mm) |


| ANALYTE | COL | RT | RT WINDOW |  | CONCENTRATION | \%D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FROM | TO |  |  |
| Aroclor-1016 | 1 | 0.00 | 0.00 | 0.00 | 0.20 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.20 | 2 |
| Aroclor-1260 | 1 | 0.00 | 0.00 | 0.00 | 0.20 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.21 | 5 |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

## LCS Dup

SW-846 8082A

| Lab Sample ID: | B136379-BSD1 |  | Date(s) Analyzed: | 12/02/2015 | 12/02/2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instrument ID (1): |  |  | Instrument ID (2): |  |  |  |
| GC Column (1): | ID: | (mm) | GC Column (2): |  | ID: | (mm) |


| ANALYTE | COL | RT | RT WINDOW |  | CONCENTRATION | $\% \mathrm{D}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FROM | TO |  |  |
| Aroclor-1016 | 1 | 0.00 | 0.00 | 0.00 | 0.21 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.20 | 3 |
| Aroclor-1260 | 1 | 0.00 | 0.00 | 0.00 | 0.19 |  |
|  | 2 | 0.00 | 0.00 | 0.00 | 0.20 | 3 |

# 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 

## FLAG/QUALIFIER SUMMARY

| * QC result is outside of established limits. |  |
| :--- | :--- |
| Wide recovery limits established for difficult compound. |  |
| Wide RPD limits established for difficult compound. |  |
| \# | Data exceeded client recommended or regulatory level |
| Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the |  |
| calculation which have not been rounded. |  |
| No results have been blank subtracted unless specified in the case narrative section. |  |
| L-03 | Sample received after recommended holding time was exceeded. |
| Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. |  |
| Reported value for this compound is likely to be biased on the low side. |  |
| Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but |  |
| the other is within limits. RPD between the two LFB/LCS results is within method specified criteria. |  |

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
CERTIFICATIONS

## Certified Analyses included in this Report

Analyte Certifications

SW-846 1030 in Soil

Ignitability

## SW-846 6010C in Water

## Arsenic

Barium
Cadmium
Chromium
Lead
Selenium
Silver
SW-846 7470A in Water
Mercury
SW-846 8015C in Soil

Gasoline Range Organics (GRO)
Diesel Range Organics
SW-846 8082A in Soil

## Aroclor-1016

Aroclor-1016 [2C]
Aroclor-1221
Aroclor-1221 [2C]
Aroclor-1232
Aroclor-1232 [2C]
Aroclor-1242
Aroclor-1242 [2C]
Aroclor-1248
Aroclor-1248 [2C]
Aroclor-1254
Aroclor-1254 [2C]
Aroclor- 1260
Aroclor-1260 [2C]
Aroclor-1262
Aroclor-1262 [2C]
Aroclor-1268
Aroclor-1268 [2C]

## SW-846 8260C in Soil

## Acetone

Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
2-Butanone (MEK)
n-Butylbenzene
sec-Butylbenzene

NY,NH,CT,NC,ME,VA

NY,CT,NC,ME,NH,VA
NY,CT,ME,NC,NH,VA
NY,CT,ME,NC,NH,VA
NY,CT,ME,NC,NH,VA
NY,CT,ME,NC,NH,VA
CT,ME,NC,NH,NY,VA
CT,ME,NC,NH,NY,VA

CT,ME,NC,NH,NY,VA

NY,VA,NH
NY,VA,NH

CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
CT,NH,NY,NC,ME,VA
NY,NC
NY,NC
NY,NC
NY,NC

CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
NH,NY,ME,VA
NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA
CT,NH,NY,ME,VA

## 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Certified Analyses included in this Report

## CERTIFICATIONS



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

## Certified Analyses included in this Report

| Analyte | Certification |
| :---: | :---: |
| SW-846 8260 C in Soil |  |
| Trichlorofluoromethane (Freon 11) | CT,NH,NY,ME,VA |
| 1,2,3-Trichloropropane | NH,NY,ME,VA |
| 1,2,4-Trimethylbenzene | CT,NH,NY,ME,VA |
| 1,3,5-Trimethylbenzene | CT,NH,NY,ME,VA |
| Vinyl Chloride | CT,NH,NY,ME,VA |
| $\mathrm{m}^{+} \mathrm{p}$ X Ylene | CT,NH,NY,ME,VA |
| o-Xylene | CT,NH,NY,ME,VA |

## SW-846 8270D in Soll

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Chrysene
Dibenz(a,h)anthracene
Fluoranthene
Fluorene
Indeno( $1,2,3-\mathrm{cd}$ )pyrene
2-Methylnaphthalene
Naphthalene
Phenanthrene
Pyrene

CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA
CT,NY,NH,ME,NC,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

| Code | Description | Number | Expires |
| :--- | :--- | :--- | :---: |
| AIHA | AIHA-LAP, LLC | 100033 | $02 / 1 / 2016$ |
| MA | Massachusetts DEP | M-MA100 | $06 / 30 / 2016$ |
| CT | Connecticut Department of Publilc Health | PH-0567 | $09 / 30 / 2017$ |
| NY | New York State Department of Health | 10899 NELAP | $04 / 1 / 2016$ |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | $02 / 5 / 2016$ |
| RI | Rhode Island Department of Health | LAO00112 | $12 / 30 / 2015$ |
| NC | North Carolina Div. of Water Quality | 652 | $12 / 31 / 2015$ |
| NJ | New Jersey DEP | MA007 NELAP | $06 / 30 / 2016$ |
| FL | Florida Department of Health | E871027 NELAP | $06 / 30 / 2016$ |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | $07 / 30 / 2016$ |
| WA | State of Washington Department of Ecology | C2065 | $02 / 23 / 2016$ |
| ME | State of Maine | 2011028 | 460217 |
| VA | Commonwealth of Virginia | 2557 NELAP | $06 / 9 / 2017$ |
| NH-P | New Hampshire Environmental Lab |  | $12 / 14 / 2015$ |

ANALYTICAL LABORATORY Emmil: info@contestlabs.com mww. contestlabs.corn
CHARNOF CUSTDDY RECORD 39 spruce street


4) How were the samples received:

On Ice $\mathbb{Z}$ Direct from Sampling
AmbientIn Cooler (s) X

Temperature ${ }^{\circ} \mathrm{C}$ by Temp blank $\qquad$
5) Are there Dissolved samples for the lab to filter?

Who was notified $\qquad$ Date
6) Are there any RUSH or SFORT HOLDING TIME samples?

Who was notified $\qquad$ Date Permission to subcontract samples? Yes No
(Walk-in clients only) If not already approved Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
7) Location where samples are stored:
8) Do all samples have the proper Acid pH:
9) Do all samples have the proper Base pH:
10) Was the PC notified of any discrepancies with the SoC vs the samples:


Were the samples received in Temperature Compliance of $\left(2-6^{\circ} \mathrm{C}\right)$ ?
 Temperature ${ }^{\circ} \mathrm{C}$ by Temp gun 2.4
$\qquad$ Time $\qquad$ $11 / 25 / 15$ Time Client Signature:

Yes
Temp

$\qquad$ Yes

Yes No
10) Was the PC notified of any discrepancies with the CoL va the samples: Yes No N/A


Laboratory Comments:


Page 2 of 2
Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client
Question

1) The cooler's custody seal, if present, is intact.
2) The cooler or samples do not appear to have been compromised or tampered with.
3) Samples were received on ice.
4) Cooler Temperature is acceptable.
5) Cooler Temperature is recorded.
6) COC is filled out in ink and legible.
7) COC is filled out with all pertinent information.
8) Field Sampler's name present on COC
9) There are no discrepancies between the sample IDs on the container and the COC.
10) Samples are received within Holding Time
11) Sample containers have legible labels.
12) Containers are not broken or leaking,
13) Air Cassettes are not broken/open.
14) Sample collection date/times are provided.
15) Appropriate sample containers are used.
16) Proper collection media used.
17) No headspace sample bottles are completely filled.
18) There is sufficient volume for all requited analyses, including any requested MS/MSDs.
19) Trip blanks provided if applicable.
20) VOA sample vials do not have head space or bubble is $<6 \mathrm{~mm}$ ( $1 / 4^{\text {" }}$ ) in diameter.
21) Samples do not require splitting or compositing. Who notified of False statements?
Doc *277 Rev. 4 August 2013
Log-In Technician Initials:
(NO TEXT ON THIS PAGE)

## SECTION U (VERSION 2.0)

## NOTICE

THE PAGES CONTAINED IN THIS SECTION U VERSION 2.0 (U-PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY FACILITITIES.

## SECTION U VERSION 2.0

DATED: March 9, 2015

1. The Contractor shall be responsible for compliance with all the provisions of the following sections and schedules, which are hereby made a part of the original contract documents:
A. "SECTION U: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages U-3 through U-13)
B. Schedule U-1 (Page U-14)
C. Schedules U-2 listing scope of utility interferences is no longer included in City contract. Such information will be part of Interference Agreement between Utility Operator and Contractor.
D. Section U-3 Page U-15 (as per the Private Utilities reference document for SECTION $U$ called "CET SPECIFICATIONS AND SKETCHES", dated November 2010).
2. Each facility operator shall provide inspectors at the work site to inspect methods of interference work, verify quantities and items of Utility Work, and coordinate all phases of the facility operator operations.
3. In addition, the following statements are made to provide clarification of various paragraphs under Section $U$ :
 negotiations with each Company for an Interference Agreement under which the Company will compensate the Contractor for any Interference Work which the Company does not elect to perform with its own forces or by specialty contractors retained by the Company. Thus the Contractor is on notice that its work under the Contract may be affected by Interference Work performed by (a) the Contractor pursuant to a separate Interference Agreement with the Company, (b) the Company, or (c) partly by each.
B. The City has no contract with any of the Companies for work on or adjacent to the site of work under this Contract, and the Companies are not "Other Contractors" as defined for the purposes of this contract. The contractor is reminded, however, that pursuant to section $U, \| 3$, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference work, regardless of whether such Interference work is covered by an Interference Agreement between the Contractor and the Company or is performed by the

Company using its own forces or by specialty contractors retained by the Company.
C. Section U, I13, provides that the provisions of section $U$ are material provisions of the Contract and that the Contractor's failure to comply with the procedures set forth in section $U$ are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

Pursuant to this Amendment, the Contractor is informed that the Performance Bond required of the Contractor pursuant to the Contract is not deemed to guarantee performance of any of the Interference Work.

## Section U: Additional Contract Requirements Applicable to Work Performed in the Presence of Privately Owned Utility Facilities

The Contractor is hereby notified that pursuant to the law and franchise agreements issued by the City, certain private utility and public service companies named in Schedule U-1 ("the Companies") own and/or operate surface and/or subsurface facilities within the limits of this contract. The existence of these facilities impacts the productivity of the City work called for in the contract. In order to improve coordination of the City construction with the private utility facilities owned and/or operated by the Companies named in Schedule U-1, Article 1.06.30 of the Standard Highway Specifications of the New York City Department of Transportation, Dated August 1, 2015; and/or Articles 10.15 through 10.18 of the Standard Sewer and Water Main Specifications of the New York City Department of Environmental Protection, Dated July 1, 2014; as applicable, are amended and will be implemented as follows:

## 1. Means and methods for City work:

a) The Contractor is hereby notified that the utility interferences may impact the performance of, and/or interferes with, City work. The contractor will be required to perform such utility work as directed by the Resident Engineer in order to clear all utility interferences from the project site as required for satisfactory completion of City work within specified contract schedule.
b) In areas serviced by overhead electric system, the contractor understands and by bidding for this contract agrees that he/she will be required to perform the public work in the presence of energized electrical overhead lines and appurtenances located in areas adjacent and/or within the project area. As a consequence he/she will select means and method of construction appropriate to maintain the safety clearances required or as permitted by electric operators in order to avoid damaging the insulation or shielding of these lines and also to prevent knocking them down.

## 2. Field inspection prior to construction:

Prior to the start of any contract work in areas serviced by overhead electric lines, and after the award to the apparent low bidder for this contract, the contractor must request a field walk of the project area along with the operator of the overhead electrical facilities and the DDC

Engineer-In-Charge. At that time the facility operator will confirm the type and condition of the overhead electrical lines and the sufficiency of their insulating properties with respect to the means and methods proposed by the contractor. The contractor must be prepared to describe in enough details his/her proposed means and methods of construction operations in order to anticipate the likelihood that electric lines insulation would be cut or otherwise compromised. Also such details will allow the facility operator to anticipate the need for added insulation and/or shielding of non-insulated lines.

## 3. Compensation for interference work:

Compensation for Interference Work is a matter of adjustment between the Contractor and each private utility company located within the limits of the project area and whose utility facilities are affected by City contract work. In particular, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, including, but not limited to, lost profit, increased overhead, or any other impact costs. Upon receipt of a Notice of Award from the City, the Contractor shall immediately commence negotiations with each of the Companies concerning the manner in which and the price for which the Contractor, through its own forces or by others hired by it, will perform and be paid by the Company for all necessary Interference Work as defined above, and at known locations of City contract work, that the Company(ies) choose(s) not to perform with its(their) own forces or by specialty Contractors hired by it (them) (as per "Interference Agreement"). (Specialty contractors' work is limited to (i) insulation installation and removal, (ii) live gas and steam work, (iii) cleanup and disposal of hazardous materials, (iv) splicing live electrical and telecommunications facilities, and (v) work not traditionally performed by general construction contractors.

## 4. Interference Agreement:

1. Although the parties may negotiate an Interference Agreement in any format or manner they deem fit, the Contractor is hereby advised that the Companies have indicated to the City that they will agree to compensate the Contractor on a unit price basis for Types of Interferences encountered on this Contract in accordance to the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010, copy of which is available on demand.
2. The Contractor shall notify the City upon concluding an Interference Agreement with each of the Companies.

## 5. City contract work to continue without Interference Agreement :

If, prior to the start of construction, as directed by the City's Order to work / Notice To Proceed (OTW/ NTP) date any of the Companies and the Contractor have not concluded an Interference Agreement as described above, then the City shall issue a written " 48 Hours notice to Public Corporation" as prescribed by the City of New York Administrative Code", commonly referred to as "Order-Outs" and City construction will proceed as ordered and the Contractor will be directed by the Resident Engineer to perform the City work on Time, Material and Equipment basis (T\&M) as specified in standard City contract agreement Article 26.2. T\&M records will include identification of types of utility facilities interfering with City work, utility facility owners, specifying the nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such work and crew size, such as: name and number of each worker employed on such work. T\&M records will also indicate the hours of active time, standby time and idle time. The Company (ies) and the Contractor will maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and will provide copies of this information to the other party on a daily basis for reconciliation. These T\&M records along with cost evaluations will be submitted daily to the Resident Engineer for review and approval. The total cost of City work will be based on quantity of work performed multiplied by unit price contract bid items. The total interference cost will be calculated as the difference between the total T\&M cost and total cost for City work. The Resident Engineer will conduct a monthly reconciliation session of the daily T\&M records with the affected Company (ies) and contractor. If the contractor and affected utility companies cannot reconcile their T\&M records, by the last day of each month, then the Resident Engineer will submit the approved City's T\&M records along with total cost evaluations to the DDC Director of Construction who will review these records and recommend approval and validity certification by the DDC Deputy Commissioner.

1. Copies of the DDC approved and certified T\&M records will then be transmitted by the DDC to the contractor and the utility companies. These certified records may be used by the contractor for compensation claims against the responsible private facility
owners, or may be used by any party as supporting documentation in dispute regarding compensation for performing Interference Work. The contractor will be required to perform City work while invoices are submitted by the contractor to the Utility companies for payment within 30 days, or while compensation disputes between contractor and affected company (ies) are submitted to Binding Arbitration process described in Paragraph 9.
2. All issues related to utility work and/ or delays due to compensation disputes or claims against utility companies are not allowable as justification for granting contract time extensions or delay claims against the City. The City may assess liquidated damages specified in the contract for net overall delays suffered by City contract work as a result of utility issues, disputes and claims.
3. The standard City contract dispute resolution process specified in Article 27 "Presentation of disputes to Commissioner", of the standard City contract agreement is not applicable to any disputes related to utility work and/ or compensation for such work or claim against utility companies. Utility work issues, disputes and claims may only be submitted to Binding Arbitration process described in Paragraph 9.
4. The contractor will notify the Resident Engineer when utility work that require the intervention of company utility specialty crews causes excessive contractor's labor and equipment standby or idleness and, thereby jeopardizing the City project schedule. The Resident Engineer will submit the facts to the DDC Director of construction who will recommend to the Deputy Commissioner regarding the issuance of a "48 hours notice" to the concerned utility company as authorized by the New York City administrative Code Section 19-143 and/ or Section 24-521 as applicable.
5. Utility delays caused by utility and/ or by unavailability of utility specialty crews cannot be discounted for earning any contractual bonus when such bonus clause is included in a contract. However, if such specified bonus is not earned or disallowed by the City or if the City assesses specified liquidated damages as a result of such excessive delays, the contractor may seek damages from the responsible utility company (ies).

## 6. Extra utility work with Utility Agreement:

If during construction the Contractor encounters utility facilities interferences-or-utility scope of work that it believes is not covered by the Interference Agreement as described above, then the Contractor shall immediately notify the Company in writing, with a copy to the City, describing the nature and location of the extra work in question. The Company then has five (5) business days to investigate the conditions and then:

1. 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;
2. Advise the Contractor and the City in writing that the Interference Agreement negotiated pursuant to Paragraph 4, provides for the scope of work encountered.
3. Advise the Contractor and the City in writing that it intends to perform the necessary utility Work with company forces or with its own contractor including, but not limited to, relocating its facility out of the way of the proposed City work. In this case, the Company shall 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 Company's schedule by the City, the Contractor shall provide access to the worksite to the Company and/or any 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 company.
4. 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 Interference Agreement negotiated pursuant to Paragraph 5, including, but not limited to, relocating, supporting, and/or protecting the Company's facilities, and/or shifting the City facility if approved by the Resident Engineer, and/or otherwise changing its operations to work in the presence of the Company's facilities. Should the Company elect this option, it must adequately define and provide an initial price offer for the work required to be performed.

## 7. Means and Methods for utility work:

Upon receipt of the Company's determination pursuant to paragraphs 6.2, or 6.4, above, the Contractor shall determine reasonable means and methods of performing the work defined by the Company. These means and methods are subject to approval of the Company, which shall not be unreasonably withheld. If, however, the Company objects to the Contractor's proposed means and methods then it shall define an alternate method of construction. Upon receipt of the Company's approval or its proposed alternate method of construction, the Contractor shall commence performance of the work defined by the Company as soon as possible, and shall perform the work in a good, workmanlike, and efficient manner, using the means and methods approved by the Company, in order to permit the City work to proceed in the most expeditious manner possible, but without imposing unreasonable and/or unnecessary costs on the Company. It is expressly understood by all parties that the City's rights pursuant to Article 4 of the Contract apply to Utility Work performed pursuant to this section.

## 8. Disputed utility work covered by a utility agreement:

The City Work will continue as described in paragraph 5 above. In the event of any dispute between the Company (ies) and the Contractor regarding any issue related to the performance of, or payment for, utility work, including, but not limited to, any indirect or impact costs incurred by the Contractor due to the Utility Work and/or to the existence of facilities owned or operated by the Company (ies) on the line of the work. The Company (ies) and the Contractor hereby agree to submit to each other a "Final Offer," in writing, by certified mail. Each party shall then have three business days to consider each other's Final Offer. In the event that neither party accepts the other's Final Offer within those three days, the Company (ies) and the Contractor agree to immediately submit the dispute to binding arbitration as described in Paragraph 9. During the pendency of any arbitration, the Company (ies) and the Contractor shall maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and to provide copies of this information to the other party on a daily basis for reconciliation. Any and all disagreement with the records maintained and provided by the other, must be documented in writing to all parties. However, these records are solely for the benefit of presentation to the arbitrator, whose decision may not necessarily be based on these records and in any event is final. Both parties should be aware that the City will not
confirm or deny the accuracy of any records maintained by either party for Utility work performed pursuant to a Utility Agreement. While the arbitration is pending, the Company shall pay the Contractor on a monthly basis, based on the price offered by the Company to the Contractor for the performance of the work.

## 9. Arbitration of utility work:

The arbitration of the issues described above shall be conducted pursuant to the Construction Industry Arbitration Rules of the American Arbitration Association (hereinafter "the Rules" and "AAA") in effect on the date the arbitration is initiated except as set forth herein. The arbitration award shall be final and binding upon the parties to the arbitration and judgment upon the award may be entered in a court having jurisdiction.
(a) Once an arbitrator(s) has been appointed by the AAA, the arbitration shall be scheduled as promptly as possible given the arbitrator(s) and the parties' schedules.
(b) No later than seven days prior to the first arbitration hearing, Company and Contractor shall submit to the arbitrator(s), and to each other, a summary of each party's respective position and such other information as is deemed appropriate, along with a copy of each party's Final Offer as specified in paragraph 8.
(c) The arbitration shall be conducted and concluded in two days.
(d) On the morning of the first day of the arbitration, Contractor and/or representatives shall have $31 / 2$ hrs to make a presentation of its claim to the arbitrator. During its presentation, Contractor shall not be permitted to produce any documents or cost records which have not already been provided to the Company. Contractor shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
(e) After lunch, Company and/or its representatives shall have two hours to ask Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Contractor questions about its claim and its presentation.
(f) On the morning of the second day of the arbitration, Company and/or its representatives shall have $31 / 2$ hours to make a presentation of its claim to the arbitrator. During its presentation, the Company shall not be permitted to produce any documents or cost records which have not already been provided to the Contractor. The Company shall be
permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
(g) After lunch, Contractor and/or its representatives shall have two hours to ask Company questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Company questions about its claim and its presentation.
(h) Subject to the above time limitations, the arbitrator(s) may conduct the arbitration in such manner as the arbitrator(s) deems reasonable.
(i) The arbitrator(s) shall then have one week to select in writing, as the arbitrator ('s) award, that party's Final Offer which appears to be more reasonable, based on the presentations at the arbitration hearings.
(j) The arbitrator shall have no discretion to grant an award other than one of the two Final Offers submitted by the parties.
(k) Any award for work that has already been performed shall be paid on the $7^{\text {th }}$ day after receipt of the arbitrator's decision, or on the $30^{\text {th }}$ day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision shall be paid within 30 days of completion of work. Interest shall accrue from the date payment is due at the rate of $9 \%$ per annum. Either party may cause judgment to be entered in accordance with the arbitrator(s) decision in a court in the State of New York, County of New York.
(1) The arbitrator's fees and any other costs of the arbitration shall be initially shared equally by Company and Contractor. The non-prevailing party shall then pay all arbitrator's fees and costs of the arbitration and shall reimburse the prevailing party for its share of such fees and costs theretofore paid.
(m) The parties may, at any time, settle any matter submitted to arbitration.

## 10. Order-out waiver:

The Contractor and all subcontractors hired by it, if an Interference Agreement is executed as specified between the concerned parties, agree to waive any rights they may have, if any, under law, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives required under the New York City Administrative Code, Section 19-143 and Section 24-521, to require any or all of the Companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove utility facilities in connection with the
work to be performed under this contract. However, nothing in this section shall preclude the City from exercising its rights under the Law to issue such a directive to the Company.

## 11. Cost of insurance:

Each of the named Companies, at their option and if an Interference Agreement is executed as specified between the concerned parties, may be named as an additional insured on all insurance policies required to be maintained under this contract. In the event that a Company opts to be so named as an additional insured, the actual incremental cost, if any, to the Contractor of providing such insurance coverage shall be borne by that Company. The Contractor shall provide a written statement from its insurance provider documenting the actual cost of this added coverage to the Company. Under no circumstances shall the cost of insurance coverage on behalf of any Company be borne by the City. Nothing in this paragraph shall 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, the Company 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 Company regulations.

## 12. Cost of utility interference work:

The Companies, by virtue of a prior agreement with the City, have agreed to perform their obligations described in this section. It is expressly understood that the cost of Utility Work or any delays cost cause by such utility work shall not be a charge against the City, but shall be a matter for adjustment between the Contractor and the Company or Companies concerned. The City and the Contractor agree that the Companies are third party beneficiaries of this section of the contract, if a Utility Agreement is executed between the contractor and utility company (ies). The provisions of this section shall govern in all cases where Company property interferes with or is about to be disturbed by the City work, notwithstanding any other provision of the Contract, except for Natural Gas transmission/distribution facilities covered subject to the Gas Facility Cost Allocation Act (GFCAA) and covered separately in this contract.

## 13. Default declaration:

The Contractor agrees that the provisions of this section are material provisions of the contract, and that the Contractor's failure to comply with the procedures set forth above are sufficient
for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

## 14. NYS Labor Law:

The Contractor is hereby advised that New York State Labor Law applies to public work. The work described in this Section $U$ of the contract performed by utility company (ies) with their own forces or vendors hired by such company (ies) is not public work.

## 15. Facility operators:

The insurance requirements in Paragraph 11 of this Section $U$ apply to: (i) additional Companies, if any, who were not named in Schedule "A" but which have executed a Utility Agreement with the contractor for utility work; and (ii) additional coverage, if any, paid for by Utility Companies whose utility facilities are located within the project limits, that they may require for the utility work pursuant to an utility agreement between the contractor and such utility companies.

(Name)<br>Deputy Commissioner, Infrastructure Division<br>Department of Design and Construction<br>30-30 Thomson Avenue<br>Long Island City, NY 11101

RE: City Work Performed in the Presence of Private Utility Facilities Project No: $\qquad$

Dear (Name):
This letter is to certify that $\qquad$ , has requested the inclusion of the attached "Section $U$ : Additional contract requirements applying to work performed in the presence of privately owned utility." The company agrees to abide by the terms of this Section $U$ at the company's own expenses due to their facilities interferences with the Public work.

Sincerely,

> By: Authorized Company Representative

Title
NOTARY PUBLIC

CERTIFIED AS TO FORM AND LEGAL AUTHORITY:

By:

## SCHEDULE U-1

## SCHEDULE U-1

 LISTING OF COMPANIES NAMED FOR THIS CONTRACT| COMPANY NAME | CONTACT NAME | CONTACT TELEPHONE |
| :--- | :--- | :--- |
| CON EDISON | THERESA KONG | $212-460-4834$ |
| VERIZON | AUBREY MAKHANLALL | $718-977-8165$ |
| TIME WARNER | JOHN PIAZZA | $718-888-4261$ |
| NATIONAL GRID | NEVILLE JACOBS | $718-963-5612$ |

## SECTION U-3

(NO TEXT IN THIS SECTION)
(NO TEXT ON THIS PAGE)

INFRASTRUCTURE DIVISION BUREAU OF DESIGN

## VOLUME 3 OF 3

```
PROJECT ID: HWR100PAD
```

HYLAN BOULEVARD

BUS PADS FOR SELECT BUS SERVICE

INCLUDING WATER MAIN, CURB AND SIDEWALK RECONSTRUCTION, AND TRFFIC WORK

Together With All Work Incidental Thereto BOROUGHS OF THE BROOKIYN AND STATEN ISLAND CITY OF NEW YORK


[^0]:    *Note: For this procurement, individual ethnicity and gender goals are not specified. The Total Participation Goal for construction contracts may be met by using either Black-American, Hispanic-American, Asian American, or Women certified firms or any combination of such firms.

[^1]:    TRADE CLASSIFICATION CODES
    (J) Journeylevel Workers
    $\begin{array}{ll}\text { (J) Journeylevel Workers } & \text { (A) Apprentice } \\ \text { (H) Helper } & \text { (TRN) Trainee }\end{array}$
    TRADE CLASSIFICATION CODES

[^2]:    Procurement Identification Number (PIN) (City contracts only)

[^3]:    Contract Registration Number (CT\#)
    (City contracts only)

[^4]:    ${ }^{1}$ 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.

[^5]:    Notary Public or Commissioner of Deeds

[^6]:    RAYMOND C. CARMAN notary public-state of new york

    No. OICA5617975
    Qualified in Nassau County
    My Commission Explifes January 31, 2019

[^7]:    Signature and Title of Authorized Official

[^8]:    Notary Public

[^9]:    * PAIN0806-001 10/01/2015

[^10]:    21-Not Certified for items(s) 22-Location Unacceptable 23-No Price Agreement 24-No Time for Bid 25 -Schedule Unacceptable 26-Other
    31-Selected 32 -Unavailable 33 - No Longer in Business 34 -Undeliverable 35 -Unreachable 36 -Unresponsive 37 - Not Selected

[^11]:    Subcontractor Approvals and Approval Amendments will be sequentially numbered for each prime contract in the order that may be approved. An approved copy will be provided to the prime contractor and the Engineer-in-Charge of the contract in each instance.

[^12]:    NOTE: A Low Bidder that submits a DBE Utilization Pre-Award Package that includes amount(s) for trucking, must complete this form to show how the commitment amount was estimated. For any long-term leased truck, submit a copy of the lease agreement. Rate should be stated as $\$ /$ day, $\$ /$ hour, $\$ /$ load, etc. and estimated duration/number of loads. (i.e., 1 truck @ $\$ 400 /$ day for 3 weeks $=\$ 6,000$ )

[^13]:    Variable Thickness For Trench and cutbacks.) Restoration, (High-Early
    Strength)

[^14]:    Robert Kreuzer
    Project Manager

[^15]:    DDC CAPIS ID No.: HWR100PAD

[^16]:    Notes:
    All concentrations are reported in parts per billion (ppb or ug/kg) ft bgs = feet below grade surface

    NS = No Standard
    ND = Compound not detected above method detection limit (see attached lab report for mdl's)

[^17]:    LiRo Engineers, Inc.
    DDC CAPIS ID No.: HWR100PAD

[^18]:    Notes:
    ftbg = feet below grade surface
    NS = No Standard
    NS = No Standard
    SU = Standard unit
    $\mathrm{J}=\mathrm{E}$
    $\mathrm{mg} / \mathrm{Kg}=$ milligram per kilogram
    $u g / \mathrm{Kg}=$ microgram per kilogram
    ${ }^{\circ} \mathrm{F}=$ Degrees Fahrenheit
    $1=$ TCLP RCRA Metals
    SB-01 through SB-03 - C
    SB-01 through SB-03 - Corridor Area 1, SB-04 through SB-06 - Corridor Area 2, and SB-07 through SB-09 - Corridor Area 3.
    DDC CAPIS ID No.: HWR100PAD

[^19]:    All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

